Arlington Conservation Commission

Date: Thursday, November 2, 2023

Time: 7:00 PM

Location: Conducted by Remote Participation and in person at the Planning and Community Development Department conference room, first floor Town Hall Annex.

Please register in advance for this meeting. Reference materials, instructions, and access information for this specific meeting will be available 48 hours prior to the meeting on the Commission's agenda and minutes page. This meeting will be conducted in a hybrid format consistent with Chapter 2 of the Acts of 2023, which further extends certain COVID-19 measures regarding remote participation in public meetings until March 31, 2025. Please note: Not all items listed may in fact be discussed and other items not listed may be brought up for discussion to the extent permitted by law. This agenda includes those matters which can be reasonably anticipated to be discussed at the meeting.

Agenda

1. Administrative
    a. Meeting Minutes.
    b. Correspondence Received.
    All correspondence is available to the public. For a full list, contact the Conservation Agent at concomm@town.arlington.ma.us.
2. Discussion
    a. Request for Certificate of Compliance: DCR Mystic River Outfall Maintenance.
    b. Enforcement Order: 66R Dudley Street.
    c. Notice of Violation: Watermill Place.
    d. Symmes Conservation Restriction.
    e. Zoning and Ownership of Town-owned Properties.
    f. CPA Updates.
    g. Water Bodies Working Group.
    - Spy Pond Invasive Control.
    h. Park & Recreation Commission Liaison.
    - Next meeting of the Park & Recreation Commission to be held on 11/14.
3. Hearings

Notice of Intent: Thorndike Place (Continuation from 10/19/23).

Notice of Intent: Thorndike Place (Continuation from 10/19/23).

The Conservation Commission will hold a public hearing under the Wetlands Protection Act to consider a Notice of Intent for the construction of Thorndike Place, a multifamily development on Dorothy Road in Arlington. This hearing will concern the Conservation Commission's request for peer review of submitted materials. This hearing will include an update on progress regarding wildlife habitat and stormwater peer review.

Request for Determination of Applicability: 70 Dow Avenue.

Request for Determination of Applicability: 70 Dow Avenue.

The Conservation Commission will hold a public hearing to consider a Request for Determination of Applicability under the Wetlands Protection Act (WPA) and Arlington Bylaw for Wetlands Protection for an addition to the existing structure at 70 Dow Avenue in Arlington.

Town of Arlington, Massachusetts

Correspondence Received.

Summary:
Correspondence Received.
All correspondence is available to the public. For a full list, contact the Conservation Agent at concomm@town.arlington.ma.us.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Correspondence_Received_-_Adam_Chaprnka.pdf	Correspondence Received - Adam Chaprnka
🗋	Reference Material	Correspondence_Received_-_Beth_Melofchik.pdf	Correspondence Received - Beth Melofchik
🗋	Reference Material	Correspondence_Received_-_Coalition_to_Save_the_Mugar_Wetlands.pdf	Correspondence Received - Coalition to Save the Mugar Wetlands
🗋	Reference Material	Correspondence_Received_-_Jo_Ann_Reneker.pdf	Correspondence Received - Jo Ann Reneker
🗋	Reference Material	Correspondence_Received_-_John_Yurewicz.pdf	Correspondence Received - John Yurewicz
🗋	Reference Material	Correspondence_Received_-_Rep._Dave_Rogers.pdf	Correspondence Received - Rep. Dave Rogers
🗋	Reference Material	Correspondence_Received_-_Stephanie_Kiefer.pdf	Correspondence Received - Stephanie Kiefer
🗋	Reference Material	Correspondence_Received_-_David_White.pdf	Correspondence Received - David White
🗋	Reference Material	Correspondence_Received_-_Robert_and_Julie_DiBiase.pdf	Correspondence Received - Robert and Julie DiBiase

Re: 2-3 foot holes being dug in Mt Gilboa

Adam Chaprnka <chaprnka@gmail.com>
Mon 10/23/2023 8:55 AM
To:David Morgan <dmorgan@town.arlington.ma.us>
Cc:ConComm <ConComm@town.arlington.ma.us>

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello again David,

Thanks for the response. Quick update: I ran into a small group of boys with bikes and shovels on Saturday. Apparently they have been digging holes and piling up dirt, carving out turns and such to make a mountain bike track in Gilboa. I am not sure this is allowed but I'm guessing it's not.

I let them know digging deep holes right along paths in Gilboa creates a safety issue where unsuspecting people might sprain an ankle or get another injury. I also let them know piling up loose dirt along the path to create their jumps would likely increase erosion which is bad for the conservation area. They appeared to be respectful middle school aged boys and they told me they would fill in the holes and stop digging in the area.

That's where I left it with them and haven't been through that way since Saturday.

On Mon, Oct 23, 2023, 8:45 AM David Morgan <dmorgan@town.arlington.ma.us> wrote:

> Thanks, Adam, I'll notify the commission and ask how they'd like to proceed.
>
> Cheers,
> David
>
> David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
>
> *Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.*
>
> ---
>
> **From:** Adam Chaprnka <chaprnka@gmail.com>
> **Sent:** Friday, October 20, 2023 11:20 AM
> **To:** David Morgan <dmorgan@town.arlington.ma.us>
> **Cc:** ConComm <ConComm@town.arlington.ma.us>
> **Subject:** Re: 2-3 foot holes being dug in Mt Gilboa
>
> CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
>
> It does not look like tree removal. I thought at first someone perhaps was digging out big rocks. Upon a surveying a wider area near the holes, it might be someone using the dirt to build mountain

bike obstacles. Not sure though.

On Fri, Oct 20, 2023, 11:13 AM David Morgan <dmorgan@town.arlington.ma.us> wrote:

Thanks, Adam. I don't know what this activity is about. Was the tree in the second photo recently removed?

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012

Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Adam Chaprnka <chaprnka@gmail.com>
Sent: Friday, October 20, 2023 10:09 AM
To: ConComm <ConComm@town.arlington.ma.us>
Subject: 2-3 foot holes being dug in Mt Gilboa

Not sure who to report this concern to or who has jurisdiction over Mt Gilboa but the Arlington Conservation Commission seemed like a good start. Wednesday I noticed 2-3 foot holes being dug alongside trails. There are more today. It does not look like any official business and its definitely a safety concern for unexpected children and seniors due to its proximity to the trail path.

Globe, Climate Chief report, Natural and Working Lands Conserved

Beth Melofchik <tankmadel@yahoo.com>

Fri 10/27/2023 9:04 AM

To:ConComm <ConComm@town.arlington.ma.us>;Susan Chapnick <s.chapnick@comcast.net>
Cc:Robin Bergman <robinorig@gmail.com>;Ellen Cohen <elscorn@aol.com>;Beth Melofchik <tankmadel@yahoo.com>

David, Susan,

Have you seen this on page 47 MA Climate Chief Melissa Hofer's report, begs the question what is Arlington's plan to preserve carbon sequestration capacity? In Boston Globe

Beth Melofchik

"The 87-page report includes 39 recommendations to meet the state's ambitious targets laid out in its 2021 climate law, which calls for halving emissions below 1990 levels by the end of the decade and reaching net-zero emissions, contributing no additional planet-warming pollution to the atmosphere, by 2050."

Massachusetts climate chief recommends statewide reforms in new report (bostonglobe.com)

From the report:

Natural and Working Lands Conserved.
To retain natural and working lands' (NWL) carbon sequestration capacity through 2050 and beyond, and to prevent further emissions of carbon held primarily in forests and wetlands, the Commonwealth has committed to increasing permanent conservation of natural and working lands in Massachusetts to at least 40 percent by 2050, with the more immediate mandates of at least 28 percent conserved by 2025 and at least 30 percent by 2030. This requires conservation of an additional 685,000 acres by 2050 (+63,400 by 2025 and +167,000 by 2030).
o EEA's "Forests as Climate Solutions" initiative will accelerate progress toward these mandates ensuring state forest management incorporates the best climate science, by enhancing forest conservation efforts through land acquisitions, increasing support for private and municipal forest conservation, and expanding and establishing forest reserves on public and private lands.
The initiative will also set, and commit to attaining, goals for forest land protection and reduced deforestation.
o The Resilient Lands Initiative sets out a vision to conserve and enhance the health of Massachusetts' forests, farms, and soils for the benefit of residents. It includes a strategy for promoting the goal of no net loss of forests and farmlands through more coordinated land use planning, investments in natural resource-based economic development, and expansion of restoration and urban greenspace efforts. o EEA and associated agencies are reviewing and updating evaluation criteria for state land

acquisitions and land conservation programs to prioritize protection of forests vulnerable to development, carbon-rich forests, wetlands, and open space upstream of wetlands such as marsh migration corridors.
o MassDEP is investigating approaches to increase statewide protection of wetlands and, at minimum, the first 50 feet of the 100-foot wetland buffer zone.

October 23, 2023

To Members of the Conservation Commission:

We are writing to address several concerns that arose at the previous hearing on October 19th for the proposed Thorndike Place development.

It was briefly discussed in the hearing that the peer reviews requested by the Conservation Commission be conducted by another engineering firm other than the Beta Group. We feel it is critical at this juncture to have a new set of eyes to provide an impartial opinion. Also discussed was the possibility of a peer review on stormwater management. We feel this is absolutely necessary given the critical nature and history of flooding in this low-lying area.

Therefore, we respectfully request that the Con Comm seek out alternative firms to conduct these two vital reviews.

Thank you for your time and attention to these concerns.

Jeanette Cummings, 32 Dorothy Rd.
Julie DiBiase, 29 Littlejohn St.

On behalf of the Coalition to Save the Mugar Wetlands

Cc: David Morgan, Environmental Planner/Conservation Agent

10-7-23

To Arlington Conservation Commission,

At a Town Day booth I was advised to contact you about the Mugar Wetlands with my opinion. I don't have a computer so I'm writing.

I'm against construction of Thorndike Place on this area, & want the area to remain as it is.

Jo Ann Reneker
24 Grove St. #2
Arlington ma 02474

Mugar Wetlands - Thorndike Place

jspikey@comcast.net <jspikey@comcast.net>

Tue 10/17/2023 1:08 PM

To:ConComm <ConComm@town.arlington.ma.us>;Jeanette Cummings <jecummings87@gmail.com>;jada86@aol.com <jada86@aol.com>

Town of Arlington, Mass.
Conservation Commission

Honorable Members

My name is John Yurewicz. I am a 57 year resident of the Town, 39 of which are at 47 Mott Street at the corner of Littlejohn Street. I write to you to explain my rationale for NOT allowing this Thorndike Place development.

We have successfully fought development on this site since 1975. There have been a few different plans, none of which were allowed. The reason(s) mostly because it would be done in an existing wetland. "Wetlands" always had some "hands off!!" effect on developers, contractors, and municipal authorities.

Now, in 2023, the authorities have come 'half circle' and are contemplating allowing this development. The site is still a large, natural wetland! It is also one of the very few wetlands in the Town and is prominent in that the site is heavily treed, and is the habitat for a wide variety of wildlife. There are so few natural green spaces and even fewer wetlands in the Town! To lose this one would be cruel to all those nearby.

What has changed?? I'll tell you! The Commonwealth of Mass. created their "40B" program that says the State can trump local zoning laws by simply being the State and declaring how much 'affordable housing' the Town must have. In 2016, there was debate between the Town and the State about just how much affordable housing there was in Arlington. The State flexed their muscles and decreed that Arlington was deficient in affordable housing as shown by some formula.

Now, in 2023, the numbers will show that the Town is, in fact, up to the required amount of affordable housing. The State, in their echelon of power claims that today's numbers don't count and all permitting and allowances must be based on those debatable numbers from seven years ago.

So, here we are today. Counting, but not limited to the 'block' described by: Route 2, Lake Street, Margaret Street, the Minuteman Bike Path, and Thorndike Field, there are approximately 240 residential single and two-family dwellings. In that 'block' are several 'sleepy', narrow residential streets connecting residents to each other and the rest of the Town. Vehicular activity within that 'block' is minimal. Adding a development the size of Thorndike Place puts a negative cast on this quiet, residential neighborhood 'Block', if you will. Without echoing all the topics raised over the years: traffic, ground water, air pollution, emergency access, infrastructure, loss of green space, and, not the least of which, a complete disruption to the daily existences of all

the occupants of those aforementioned dwellings, we can add all those residents on the other side of Lake Street and Margaret Street. Everyone described will be negatively effected! Lake Street already acts as a very busy two way connector from Mass. Ave. to Route 2 and this development will further enlarge and congest that traffic.

All through these nearly fifty years of fending off developments and winning, we neighboring owners have watched as the owners of these wetlands have been "absentee landlords"! Homeless people have set up in a hodge podge of a lesser than 'shanty-town' cardboard, tents, lean-to's, and a whole barrage of trashy, unhealthy living waste! The landlord NEVER provided policing or rejection of these conditions. Large, old trees have fallen and never been cut and removed. The wonderful benefits of that green space have been countered by a non-participating landlord who, now, wants to build, sell, collect monies, and then "DONATE" the remaining, undeveloped land to the Town for the Town to police and maintain, so they can wipe their hands clean of any future responsibility, just like that!

Absolutely none of the proposed development benefits any of the many occupants of the previously described 'block'! In reality it is all a huge negative in so many ways! Underground water aquifers, additional motor vehicle traffic, a strain to the existing services (water, sewer, electricity), delays to emergency access to all the streets in and around the 'Block', and the permanent loss of natural greenery!

Consider, also, that owners and developers in cities and towns throughout Massachusetts will be watching to see what happens with this wetland development! An environmentally dangerous precedent could be set!

In closing, a word comes to mind: "Conserve"! If this wetland is allowed to be ruined and is lost because of the proposed Thorndike Place Development, I wonder what will remain for our Conservation Commission to "Conserve". Instead, we can all mull what was lost because an absentee landlord managed to convince authorities that their development is a good thing. It is NOT, in any way, a good thing.

Please consider closely what will be lost with this proposed development.

Respectfully submitted,

John C. Yurewicz

The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

DAVID M. ROGERS
STATE REPRESENTATIVE
24th MIDDLESEX DISTRICT

STATE HOUSE, ROOM 544
TEL: (617) 722-2637
Dave.Rogers@MAhouse.gov

To the members of the Arlington Conservation Commission:

I write to you today in my capacity as a state representative whose district encompasses the site of the proposed Thorndike Place development. First off, let me state that I greatly respect your service and also deeply appreciate the difference between local versus state issues. As such, in my 10 years as the State Representative for the 24th Middlesex District, very rarely do I offer testimony to local governmental bodies. The significance of this project compels me to do so.

I have expressed my opposition to this proposed development in the past, as has Arlington Town Meeting, the Select Board and the overwhelming majority of town residents. While I am already on record, I would like to briefly reiterate a number of concerns about the current proposal. First off, one of the most pressing worries is the prospect of increased flooding. The builder proposes to undertake construction on 7 acres in the wetlands—5.5 of which are in the FEMA floodplain. These wetlands act a "sponge" for the surrounding area. Failure to preserve this natural safeguard may well lead to increased flooding in the neighborhood, affecting homes and businesses, including the Thorndike Field complex used by Arlington's children and students. Over time, as climate change worsens and precipitation events become more intense, we can expect flooding to grow more extreme.

In addition, the area around the proposed development is one of the largest remaining open spaces in Arlington. As the Greater Boston region is faces more development, our remaining wild spaces become more precious. Deer, foxes, birds, and a variety of other wildlife call the wetlands home. Paving over these wetlands would irreversibly damage one of the last refuges for wild animals in Arlington at a time when biodiversity and habitat loss are important concerns.

Of course, increased traffic and the corresponding increase in harmful emissions is another concern. Those emissions will degrade air quality in town, particularly in East Arlington.

I am aware that the Conservation Commission has asked for extensive peer reviewed studies, particularly pertaining to hydrology, and I appreciate the countless hours of work from the Conservation Commission that has gone into evaluating this project already. As the body whose mission it is to protect and preserve Arlington's wetlands and conservation lands, I humbly and respectfully request that you to continue to consider fully all of the deleterious environmental and ecological impacts of the project. In doing so, I hope and trust that every possible effort is made under the law to protect our local environment and the community at large.

Thank you for your time, and for your consideration of this important matter.

Regards,
Dave Rogers

State Representative
24th Middlesex District
(Arlington/Belmont/Cambridge)

Re: Thorndike Place Development

David Morgan <dmorgan@town.arlington.ma.us>
Thu 10/26/2023 3:48 PM

To:Stephanie Kiefer <SKiefer@smolakvaughan.com>
Cc:Rinaldi, Dominic R. <drinaldi@bscgroup.com>

1 attachments (15 KB)
Thorndike Place Peer Review Solicitation.docx;

Hi Stephanie,
Yes, the call for peer reviewers went out to five firms this afternoon. For stormwater review, I solicited Weston & Sampson and Kleinfelder. For habitat review, Landscape Stewardship, Inc., and for both, I asked Hatch and SWCA. Bids will have to be submitted for each by the 31st. Additional details can be found in the attached.

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Stephanie Kiefer <SKiefer@smolakvaughan.com>
Sent: Tuesday, October 24, 2023 1:08 PM
To: David Morgan <dmorgan@town.arlington.ma.us>
Cc: Rinaldi, Dominic R. <drinaldi@bscgroup.com>
Subject: RE: Thorndike Place Development

David,

Thank you. Could you kindly confirm whether the Commission has advanced efforts to advance the peer review as voted on at last week's hearing and provide all written scopes or proposed contracts related thereto. Thank you in advance.

Best,

Stephanie

Stephanie A. Kiefer, Esq.
Tel. 978.682.5220 (Direct)
SMOLAK & VAUGHAN LLP
ATTORNEYS AT LAW

From: David Morgan <dmorgan@town.arlington.ma.us>
Sent: Tuesday, October 24, 2023 8:37 AM
To: Rinaldi, Dominic R. <drinaldi@bscgroup.com>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Subject: Fw: Thorndike Place Development

Hi Dom and Stephanie,
Please see below and attached.

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Coalition to Save the Mugar Wetlands <savethemugarwetlands@gmail.com>
Sent: Monday, October 23, 2023 6:26 PM
To: ConComm <ConComm@town.arlington.ma.us>
Cc: David Morgan <dmorgan@town.arlington.ma.us>
Subject: Thorndike Place Development

To Members of the Conservation Commission:

Attached please find a letter to the Conservation Commission from the Coalition to Save the Mugar Wetlands regarding the hearing of October 19th.

Thank you,

Jeanette Cummings
32 Dorothy Rd.

On Behalf of the Coalition to Save the Mugar Wetlands

Future Rainfall Analysis

David White <whitede@gmail.com>

Tue 10/31/2023 9:56 AM

To:ConComm <ConComm@town.arlington.ma.us>;Chuck Tirone <ctirone@ci.reading.ma.us>;Stevens, Nathaniel (home) <stevensnathaniel11@gmail.com>;Mike Gildesgame <mikeg125@gmail.com>;David White <dwhite@gilbertwhite.com>;Susan Chapnick <s.chapnick@comcast.net>;Dave Kaplan <dkaplan31@gmail.com>;Brian McBride <BrianMcB@outlook.com>

1 attachments (2 MB)

TY2050 20221202techslidedeckdraftforcomments.pdf;

All,

As part of the planning for the new CSO control plan Cambridge, Somerville and MWRA have come up with new climate based rainfall projections for 2050 (see attached draft).

Something we might want to look at and perhaps reference in the future.

Note that a Typical Year is somewhat an artificial construct for CSO planning purposes, but 2050 is a big increase from the current 1992 Typical Year.

David

Proposed Thorndike Place

Julie DiBiase <jada86@aol.com>

Thu 10/26/2023 9:35 PM

To:ConComm <ConComm@town.arlington.ma.us>;David Morgan <dmorgan@town.arlington.ma.us>

Dear Conservation Committee Members,

We are writing to submit comments pertaining to the last Con Com hearing on October 19th regarding the proposed Thorndike Place development.

As discussed during the hearing, the potential for a Peer Review on the Developer's storm water mitigation plans was to be determined by the Town's Engineer. This is a critical issue that impacts the many residents in the area that consistently experience flooding and warrants further review. We respectfully ask that a Peer Review be done to determine what the impact will be to our existing systems which are already undersized.

We also ask that Beta Group not be used for any Peer Reviews that the Con Com purposes. Since, Beta Group has worked on the proposed project during the ZBA's review, we believe it would be beneficial to hire a different consultant to put a "fresh set of eyes" on the project for evaluating the woodland restoration, wildlife enhancement, and storm water management.

Thank you,

Robert and Julie DiBiase
29 Littlejohn Street

Town of Arlington, Massachusetts

Request for Certificate of Compliance: DCR Mystic River Outfall Maintenance.

Summary:
Request for Certificate of Compliance: DCR Mystic River Outfall Maintenance.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	DCR_Mystic_River_Outfall_-_Order_of_Conditions_10.19.2018.pdf	DCR Mystic River Outfall - Order of Conditions 10.19.2018.pdf
🗋	Reference Material	DCR_Mystic_River_Outfall_Maintenance_-_COC_-_09.18.23.pdf	DCR Mystic River Outfall Maintenance - COC - 09.18.23.pdf

TOWN OF ARLINGTON
730 Massachusetts Ave.
Arlington, MA 02476
781-316-3012

ARLINGTON CONSERVATION COMMISSION

CERTIFICATE OF UNDERSTANDING

RE: Findings and Special Conditions in Wetland Resource Areas, Buffer Zones, and Regulatory Floodways

Street Address: Mystic River State Reservation DEP File No: 091-0302

Owner: Nick Grove, DCR Issue Date: October 19, 2018

I,_____, owner of _____, Arlington, Massachusetts, do hereby acknowledge and understand that:

• All or some of my property lies within wetland resource areas such that any **new work** within this area is subject to review and approval by the Conservation Commission;	_____ Initials
• I, as property owner, am **responsible for all work on my property** even if it is conducted by contractors;	_____ Initials
• I have received**, read and understand all the general and special conditions** contained in the referenced Order of Conditions;	_____ Initials
• There are specific **requirements PRIOR to the start of work** which I agree to follow;	_____ Initials
• There are specific **requirements DURING construction and work** which I agree to follow;	_____ Initials
• There are specific **requirements for getting a Certificate of Compliance** once all permitted work is completed; and	_____ Initials
• There are a number of **ongoing/perpetual conditions that restrict the kind of landscaping and maintenance activities** allowed within wetland resource areas and/or buffer zones.	_____ Initials

I have carefully reviewed and understand all of these requirements and agree to adhere to them.

_____ _____ _____
Signature Printed Name Date

TOWN OF ARLINGTON
730 Massachusetts Ave.
Arlington, MA 02476
781-316-3012

ARLINGTON CONSERVATION COMMISSION

CERTIFIED MAIL DELIVERY **October 19, 2018**

Nick Grove
Department of Conservation and Recreation
251 Causeway Street, Suite 700
Boston, MA 02114

RE: Order of Conditions for DCR Mystic River Outfall Maintenance - DEP File Number 091-0302

Enclosed is the original Order of Conditions permit for the above-referenced project, issued pursuant to the Wetlands Protection Act, GL c. 131, § 40, and the Arlington Bylaw for Wetland Protection, Title V, Article 8.

No work on the project may begin until ALL of the following requirements have been satisfied:

- ☐ You have signed and returned to this office the attached Certificate of Understanding.
- ☐ The 10-business day appeal period has elapsed. The appeal period begins on the date of issuance of the Order.
- ☐ You have had the original Order recorded at the Middlesex South Registry of Deeds and the receipt forwarded to the Conservation Commission. The Order is not valid until properly recorded.
- ☐ The DEP file number sign has been erected at the project entrance (as specified in the General Conditions).
- ☐ You have read and understand the enclosed Order of Conditions. Compliance with all conditions and the approved plans is the responsibility of the applicant. Deviation from the approved plans may result in a stop work order or further enforcement, as well as the inability to obtain a Certificate of Compliance.
- ☐ You have conducted a "pre-construction site visit" with the Conservation Administrator, installed erosion controls, submitted in writing the names and telephone numbers of the parties responsible for the work (such as the general contractor, erosion control monitor, field engineer, and wetland scientist), and submitted a schedule of construction, as applicable.
- ☐ Please note that there may be other specific requirements in your Order of Conditions, which may be required for your site. Please be sure to read the whole Order. It is your responsibility to comply with all aspects of the Order.

Upon completion of the project, you must submit:

- ☐ A "Request for a Certificate of Compliance" (state WPA form 8a) and
- ☐ An engineer-stamped and signed "as-built plan" to the Conservation Commission stating that all conditions have been satisfactorily completed in compliance with the plans and the Order.

Once received, your Certificate of Compliance must be recorded at the Middlesex South Registry of Deeds, and the receipt sent to the Conservation Office (as per the Wetlands Protection Regulations).

Please contact our office with any questions at 781-316-3012 or email esullivan@town.arlington.ma.us.

Thank you,

Emily Sullivan
Environmental Planner & Conservation Agent

Enclosures: Order of Conditions
Certificate of Understanding

cc: file, DEP-NERO, Matt Devlin (AECOM)

Received by _____ Date _____

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File # 091-0302

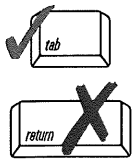
eDEP Transaction #

Arlington
City/Town

A. General Information

Please note: this form has been modified with added space to accommodate the Registry of Deeds Requirements

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. From: Arlington
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Nick (a. First Name) | Grove (b. Last Name)

Dept of Conservation and Recreation
c. Organization

251 Causeway Street, Suite 700
d. Mailing Address

Boston (e. City/Town) | MA (f. State) | 02114 (g. Zip Code)

4. Property Owner (if different from applicant):

a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

5. Project Location:

Mystic River State Reservation
a. Street Address

Arlington
b. City/Town

Maps 48 and 64
c. Assessors Map/Plat Number

Map 48 Lot 8-2 and Map 64 Lot 3-8
d. Parcel/Lot Number

Latitude and Longitude, if known: 42d25m19.1778s (d. Latitude) | -71d8m43.4256s (e. Longitude)

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
   Middlesex (a. County) | (b. Certificate Number (if registered land)) | (c. Book) | (d. Page)

7. Dates: 09/20/2018 (a. Date Notice of Intent Filed) | 10/04/2018 (b. Date Public Hearing Closed) | 10/19/2018 (c. Date of Issuance)

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
   Existing Conditions & Site Preparation Plan, Excavation Plan, Restoration Plan (a. Plan Title)
   AECOM (b. Prepared By) | Randall Twiss, P.E. (c. Signed and Stamped by)
   09/17/2018 (d. Final Revision Date) | 1"=60', 1"=10', (e. Scale)
   (f. Additional Plan or Document Title) | (g. Date)

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

   Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

a. ☒ Public Water Supply b. ☐ Land Containing Shellfish c. ☒ Prevention of Pollution
d. ☒ Private Water Supply e. ☐ Fisheries f. ☒ Protection of Wildlife Habitat
g. ☒ Groundwater Supply h. ☒ Storm Damage Prevention i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

B. Findings (cont.)

Denied because:

b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) _____ a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☒ Bank	198 a. linear feet	190 b. linear feet	0 c. linear feet	0 d. linear feet
5. ☐ Bordering Vegetated Wetland	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
6. ☒ Land Under Waterbodies and Waterways	134 a. square feet	134 b. square feet	0 c. square feet	0 d. square feet
	_____ e. c/y dredged	_____ f. c/y dredged		
7. ☒ Bordering Land Subject to Flooding	0 a. square feet	0 b. square feet	0 c. square feet	0 d. square feet
Cubic Feet Flood Storage	0 e. cubic feet	0 f. cubic feet	0 g. cubic feet	0 h. cubic feet
8. ☐ Isolated Land Subject to Flooding	_____ a. square feet	_____ b. square feet		
Cubic Feet Flood Storage	_____ c. cubic feet	_____ d. cubic feet	_____ e. cubic feet	_____ f. cubic feet
9. ☒ Riverfront Area	3,208 a. total sq. feet	3, 208 b. total sq. feet		
Sq ft within 100 ft	3,208 c. square feet	3, 208 d. square feet	_____ e. square feet	_____ f. square feet
Sq ft between 100-200 ft	0 g. square feet	0 h. square feet	_____ i. square feet	_____ j. square feet

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. ☐ Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		
22. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

B. Findings (cont.)

* **#23**. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BVW | b. square feet of salt marsh

24. ☐ Stream Crossing(s):

a. number of new stream crossings | b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. The work is a maintenance dredging project as provided for in the Act; or
   b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
   c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 10/19/2021 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number 091-0302"

11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.

12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.

13. The work shall conform to the plans and special conditions referenced in this order.

14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.

15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

19. The work associated with this Order (the "Project")
    (1) ☐ is subject to the Massachusetts Stormwater Standards
    (2) ☒ is NOT subject to the Massachusetts Stormwater Standards

    If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

    a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

    b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
    i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
    ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
    iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):
See Attached Findings and Conditions

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No

2. The Arlington Conservation Commission hereby finds (check one that applies):

   a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

   _____ (1. Municipal Ordinance or Bylaw) _____ (2. Citation)

   Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

   b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

   Arlington Bylaw for Wetlands Protection (1. Municipal Ordinance or Bylaw) Title V, Art 8 (2. Citation)

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

   The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

   See attached Findings and Conditions

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File # 091-0302

eDEP Transaction #

Arlington
City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

10/19/2018
1. Date of Issuance

Please indicate the number of members who will sign this form.
This Order must be signed by a majority of the Conservation Commission.

7
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

☐ by hand delivery on

Date

☒ by certified mail, return receipt requested, on 10/19/2018

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Arlington
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Arlington
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Mystic River State Reservation
Project Location

MassDEP File Number

Has been recorded at the Registry of Deeds of:

County | Book | Page

for: Property Owner

and has been noted in the chain of title of the affected property in:

Book | Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Request for Departmental Action Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

Provided by DEP

A. Request Information

1. Location of Project

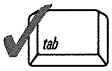
a. Street Address

b. City/Town, Zip

c. Check number

d. Fee amount

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



2. Person or party making request (if appropriate, name the citizen group's representative):

Name

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

4. DEP File Number:

B. Instructions

1. When the Departmental action request is for (check one):

☐ Superseding Order of Conditions – Fee: $120.00 (single family house projects) or $245 (all other projects)

☐ Superseding Determination of Applicability – Fee: $120

☐ Superseding Order of Resource Area Delineation – Fee: $120

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Request for Departmental Action Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

Provided by DEP

B. Instructions (cont.)

Send this form and check or money order, payable to the *Commonwealth of Massachusetts,* to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/).

4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

DOCUMENTS REVIEWED

1. Notice of Intent for work at Mystic River State Reservation, Arlington, MA, prepared by AECOM., for the Applicant: Department of Conservation and Recreation, dated September 20, 2018.

2. Project Site Locus Map, prepared by AECOM, not dated.

3. Project Site Overview Map, prepared by AECOM, not dated.

4. FEMA National Flood hazard Layer FIRMette, prepared by AECOM, dated August 9, 2018.

5. Outfall Photographic Log, prepared by AECOM, dated April 18, 2018.

6. Site Plan and Project Details, prepared by AECOM, dated September 19, 2018.

PROCEDURAL SUMMARY

The Conservation Commission held a public hearing on the Notice of Intent on October 4, 2018. The Commission closed the hearing on October 4, 2018, deliberated and voted 6-0, with 1 member absent, to approve the Project with conditions under the Wetlands Protection Act (the "Act") and voted 6-0, with 1 member absent, to approve the Project with conditions under the Arlington Wetlands Protection Bylaw (the "Bylaw").

FINDINGS OF FACT AND LAW UNDER ARLINGTON WETLANDS PROTECTION BYLAW AND WETLANDS PROTECTION ACT

A. The Project as approved is a "Limited Project" under the 310 CMR 10.53(3)(k). The project involves the maintenance and replacement of 12 outfalls using methods of minimal disturbance to resource areas along the Lower Mystic Lake and Mystic River. Methods include replacement of existing pipes from outfalls back to street connections, replacement of headwalls with pre-cast concrete wing wall sections, flared end section installation, generally cleaning of debris, rip-rap stone replacement, and removal of broken pipe and headwall pieces from the bank of the Mystic River. The new outfall pipes will be approximately 12-inch diameter reinforced concrete pipe. Nine of the 12 outfalls will be replaced with pre-cast concrete wing walls with stone rip-rap bedding underlined with geo-fabric. Three of the 12 outfalls will be replaced with flared end sections and rip-rap stone bedding.

B. The Project site contains approximately 27,358 sf of temporary impact and approximately 3,208 sf of permanent impact to the Riverfront Area,. Approximately 198 lf of bank will be permanently impacted and approximately 134 sf of land under waterbodies and waterways will be permanently impacted.

C. The following Resource Areas are present on the site or within 200 feet of the lot lines: perennial stream, Bordering Vegetated Wetland ("BVW"), Bank to stream and BVW, Adjacent Upland Resource Area ("AURA") (Bylaw) and Buffer Zone (Act) to Bank and BVW, and Riverfront Area. The Commission finds accurate the delineation of Resource Areas shown on the approved Site Plan.

D. Because work proposed does not increase impervious surface, the Commission finds the project meets the performance standards for work in the AURA. The Commission also finds that this project qualifies as a "Limited Project" under the 310 CMR 10.53(3)(k)

E. The proposal also includes vegetation replanting and seeding, tree removal of 12 trees and replacement of 24 trees, and invasive species removal and maintenance.

F. Based on the testimony at the public hearing, and review of the application materials and the documents listed above submitted during the public hearing, the Commission concludes that the proposed Project will not alter Resource Areas under the Act and Bylaw, the work as conditioned will not have significant or cumulative effects upon the interests of the Wetlands Protection Act or the Resource Area values of the Arlington Wetlands Bylaw when the conditions imposed are implemented to protect the Resource Area values. With the conditions contained herein, the Project meets the performance standards in the Bylaw Regulations and state Wetlands Regulations, 310 CMR 10.00.

Additional Special Conditions

In addition to the General Conditions (numbered 1 – 20 above), the Project is subject to the following Additional Special Conditions (under both the Act and Bylaw):

21. Work permitted by this Order and Permit shall conform to the Notice of Intent, the approved plans and documents (listed above), and oral representations (as recorded in hearing minutes) submitted or made by the Applicant and the Applicant's agents or representatives, as well as any plans and other data, information or representations submitted per these Conditions and approved by the Commission.

22. The provisions of this Order and Permit shall apply to and be binding upon the Applicant and Applicant's assignees, tenants, property management company, employees, contractors, and agents.

23. No work shall be started under this Order until: (a) all other required permits or approvals have been obtained and (b) the appeal period of ten (10) business days from the date of issue of this Order has expired without any appeal being filed and (c) this Order has been recorded in the Registry of Deeds. No work shall be started under this Permit until all other necessary permits or approvals have been obtained.

24. The Applicant shall ensure that a copy of this Order of Conditions and Permit for work, with any referenced plans, is available on site at all times, and that contractors, site managers, foremen, and sub-contractors understand its provisions.

25. Prior to starting work, the Applicant shall submit to the Commission the names and 24-hour phone numbers of project managers or the persons responsible for site work or mitigation.

26. Before work begins, erosion and sediment controls shall be installed at the limits of the work area. These will include a silt fence and 12 inch straw or silt wattle around the entire work area (haybales are not allowed and silt socks are preferred).

27. The contractor shall contact the Conservation Agent (concomm@town.arlington.ma.us ; 781-316-3012) to arrange for a pre-construction meeting with the on-site project manager to walk through the Order of Conditions, confirm the wash out location, and walk the site to confirm the installation and placement of erosion controls prior to the start of any grading or construction work.

28. The contractor shall provide written Notice of the work start date to the Conservation Agent 48 hours prior to start of work.

29. All dumpsters must be covered at the end of each work day, and no dumpsters will be allowed overnight within the 100 foot Buffer Zone or Adjacent Upland Resource Areas ("AURA") or other Resource Areas.

30. No uncovered stockpiling of materials shall be permitted overnight within 100 feet of any waterway or water body. All stockpiled material shall be adequately covered at all times when not in use and stored in the holding area between the river bank and Mystic Valley Parkway. Erosion control measures including silt socks, silt fences, 12 inch straw, or silt wattle shall be installed surrounding the stockpile.

31. Areas that are disturbed by construction and access activities shall as soon as possible be brought to final grade and reseeded and restabilized, and shall be done so prior to the removal of the erosion control barrier.

32. Arrangements shall be made for any rinsing of tools, equipment, etc. associated with on–site mixing or use of concrete or other materials such that the waste water is disposed of in the concrete wash out station-at least 50 feet from the resource area. In no case may waste water be discharged into or onto Resource Areas on or adjacent to the site. In no case may waste water be placed in stormdrains. Any spillage of materials shall be cleaned up promptly.

33. Any dirt or debris spilled or tracked onto any paved streets shall be swept up and removed daily.

34. No heavy equipment may be stored overnight within 50 feet of the wetland and no refueling or maintenance of machinery shall be allowed within the 100-foot Buffer Zone, 200-foot Resource Area, and Adjacent Upland Resource Area or within any Resource Area.

35. The Commission, its employees and its agents shall have the right of entry onto the site to inspect for compliance with the terms of this Order of Conditions and Permit until a Certificate of Compliance has been issued.

36. When requesting a Certificate of Compliance for this Order of Conditions, the Applicant must submit a written statement from a Massachusetts professional engineer, registered land surveyor, or registered landscape architect certifying that the completed work complies with the plans referenced in this Order, or provide an as-built plan and statement describing any differences.

37. The Applicant shall specify dewatering methods. Any dewatering operations shall conform to the following:
    (a) Notify the Conservation Commission that dewatering is required.
    (b) Any catch basins, drains, and outfalls to be use in dewatering operations shall be clean out before operations begin.
    (c) Any water discharged as part of any dewatering operation shall be passed through filters, on-site settling basins, settling tank trucks, or other devices to ensure that no observable sediments or pollutants are carried into the Resource Area, street, drain, or adjacent property.
    (d) Measures shall be taken to ensure that no erosion or scouring shall occur on public or private property, or on the banks or bottoms of water bodies, as a result of dewatering operations.

38. The Applicant shall maintain plantings for three years, including invasive species management. Invasive species monitoring reports shall be submitted to the Conservation Committee annually for three consecutive years, due on November 1st of each consecutive year.

39. The Applicant shall protect all area trees per the Town Wetlands Protection Regulations, Section 24 Vegetation Removal and Replacement, protecting trees through securing (not nailing) 2x4 boards, between 6-8 feet in length, around tree base. The boards shall be installed vertically such that one end is installed directly into the ground.

40. The Applicant shall conduct daily street cleanings at the end of each work day.

41. The Applicant shall protect all adjacent catch basins using silt socks.

42. The Applicant shall conduct catch basin sump cleanings at the end of the project work period.

43. The Applicant shall complete the proposed work during low flow conditions only.

44. Pervious surfaces shown on the project plans shall be maintained and not be replaced by impervious surfaces. This shall be a continuing condition that survives the expiration of the permit and shall be included in any Certificate of Compliance as a continuing condition.

AECOM Environment

Prepared for:
Department of Conservation
and Recreation

Prepared by:
AECOM
Chelmsford, MA
60687346
September 2023

Request for Certificate of Compliance
(WPA Form 8A)

DCR Mystic River Outfall Maintenance
Arlington, Massachusetts
DEP File Number 091-302

Contents

1. Copy of CoC Request Cover Letter

AECOM
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

September 18, 2023

Ms. Susan Chapnick, Chair
Arlington Conservation Commission
730 Massachusetts Avenue
Arlington, MA 02476

Subject: Request for Certificate of Compliance, DEP File No. 091-302
DCR Mystic River Outfall Maintenance Project
Arlington, Massachusetts

Dear Ms. Capnick,

On behalf of the Massachusetts Department of Conservation and Recreation (DCR), AECOM respectfully submits the enclosed Certificate of Compliance Request to the Arlington Conservation Commission regarding the reconstruction of the several stormwater outfalls along the Mystic River. Order of Conditions 091-302 authorized the reconstruction of 12 stormwater outfalls; however, upon further investigation it was determined that three of the outfalls were not owned by DCR. Accordingly, construction was completed on nine of the outfalls and the remaining three outfalls will not be reconstructed. Two outfalls were misidentified in the Notice of Intent, as outfall UNID-1 and 14628 were labeled as one another. The attached As-built plan depicts the correct outfall numbers. Table 1 depicts the status of the outfalls authorized for reconstruction.

Table 1: Stormwater Outfall Reconstruction Status

Outfall ID	Repair/Proposed Work Activity	Status
14631	Flared-end with rip rap	Not reconstructed
14632	Wing wall/rip rap bedding	Complete
14625	Flared-end with rip rap	Complete
14636	Flared-end with rip rap	Not reconstructed
22776	Wing wall/rip rap bedding	Complete
UNID-1	Flared-end with rip rap	Not reconstructed
14628	Wing wall/rip rap bedding	Complete
14922	Wing wall/rip rap bedding	Complete
34494.1	Wing wall/rip rap bedding	Complete
14926	Wing wall/rip rap bedding	Complete
22200	Wing wall/rip rap bedding	Complete
14930	Wing wall/rip rap bedding	Complete

The following items are enclosed with this request:

- Copy of Form WPA 8A;
- Professional Engineer affidavit (referencing only the completed outfalls); and,
- $200 COC request bylaw filing fee.

We understand that an on-site project compliance inspection may be scheduled in advance of the public hearing at which this COC Request will be considered. As AECOM will attend this site visit on behalf of the applicant, please contact Tom Keough at (978) 496-6517 with the hearing and site visit date.

Yours sincerely,

Thomas J. Keough
Sr. Wetland Scientist
thomas.keough@aecom.com

cc: Department of Environmental Protection, Northeast Regional Office
Thomas Valton, DCR

2. Wetland Protection Act Form 8A

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

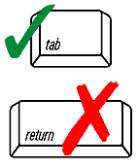
WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number: 091-302 (Provided by DEP)

A. Project Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. This request is being made by:

Priscilla Geigis, Massachusetts Department of Conservation and Recreation
Name

10 Park Plaza, Suite 6620
Mailing Address

Boston | MA | 02116
City/Town | State | Zip Code

617-626-4986
Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Nick Grove, Massachusetts Department of Conservation and Recreation
Applicant

10/19/2018 | 091-302
Dated | DEP File Number

Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

3. The project site is located at:

Mystic River State Reservation | Arlington
Street Address | City/Town

Maps 48 and 64 | M 48 Lot 8-2 & M 64 Lot 3-8
Assessors Map/Plat Number | Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Massachusetts Department of Conservation and Recreation
Property Owner (if different)

Middlesex | 73537 | 415
County | Book | Page

Certificate (if registered land)

5. This request is for certification that (check one):

☐ the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

☒ the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).
Outfalls 14632, 14625, 22776, Unkown-1, 14922, 34494.1, 14926, 22200, and 14930 were constructed as authorized. No construction activies took place at outfalls 14631, 14636, and 14628

☐ the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

☒ Yes — If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

☐ No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html).

3. Signed Affidavit of Project Compliance/Completion

Randall Twiss, P.E.
Registered Professional Engineer
AECOM
250 Apollo Drive
Chelmsford, MA, 01824
(617) 892-0080

August 8, 2023

Conservation Commission
Town of Arlington
730 Massachusetts Avenue
Arlington, MA 02476

RE: DEP 91-0302, Engineer Certification of Order of Conditions, DCR Mystic River Outfall Maintenance Project, DCR - Nick Grove, 190 Arlington Street, Acton, MA 01920.

Dear Commissioners:

The limited site clearing, the replacement of outfall structures, general debris cleanup, rip-rap slope armoring, broken pipe repair/replacement, revegetation (plantings and seeding) and stabilized was completed on the Mystic Valley Parkway south of Lower Mystic Lake.

Enclosed is an "As-Built" plan showing the completed work as constructed dated May 23, 2023.

This Certification is provided as part of the Request for Certificate of Compliance, WPA Form8A:

I hereby Certify, to the best of my professional knowledge, the project work was completed in compliance with the Order of Condition (issuance date of October 19, 2018) and stormwater infrastructure repairs, grading and landscaping within portions of the project subject to the Conservation's compliance were built in substantial compliance with the Mystic Valley Parkway Outfall Restoration Project – NOI Plan Set prepared for DCR dated September 19, 2018.

Sincerely,

Randall Twiss

Randall Twiss, PE

cc: DCR

4. Photo Log

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Massachusetts Department of Conservation and Recreation	Stormwater Support – Arlington DCR Outfalls	60687346

Photo No.	Date:
1	9/5/2023

Outfall 14632:

Looking East at the new headwall.

Photo No.	Date:
2	9/5/2023

Outfall 14625:

Looking southwest. Close up view of the new flared end.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Massachusetts Department of Conservation and Recreation	Stormwater Support – Arlington DCR Outfalls	60687346

Photo No.	Date:
3	9/5/2023

Outfall 22776:

View of new headwall

Photo No.	Date:
4	9/5/2023

Outfall 14628 (identified in NOI as Unknown-1):

View of new headwall.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Massachusetts Department of Conservation and Recreation	Stormwater Support – Arlington DCR Outfalls	60687346

Photo No.	Date:
5	9/5/2023

Outfall 14922:

View of new headwall.

Photo No.	Date:
6	9/5/2023

Outfall 34494.1:

View of new headwall.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Massachusetts Department of Conservation and Recreation	Stormwater Support – Arlington DCR Outfalls	60687346

Photo No.	Date:
7	9/5/2023

Outfall 14926:

View of new headwall.

Photo No.	Date:
8	9/5/2023

Outfall 22200:

View of new headwall.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Massachusetts Department of Conservation and Recreation	Stormwater Support – Arlington DCR Outfalls	60687346

Photo No.	Date:
9	9/5/2023

Outfall 14930:

Outfall discharge point is buried in the slope.

5. As-Built Plan

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	1	18
	CONTRACT NO. P17-2724-X2A		

TITLE SHEET

PROJECT NAME:

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT

IN THE TOWN OF

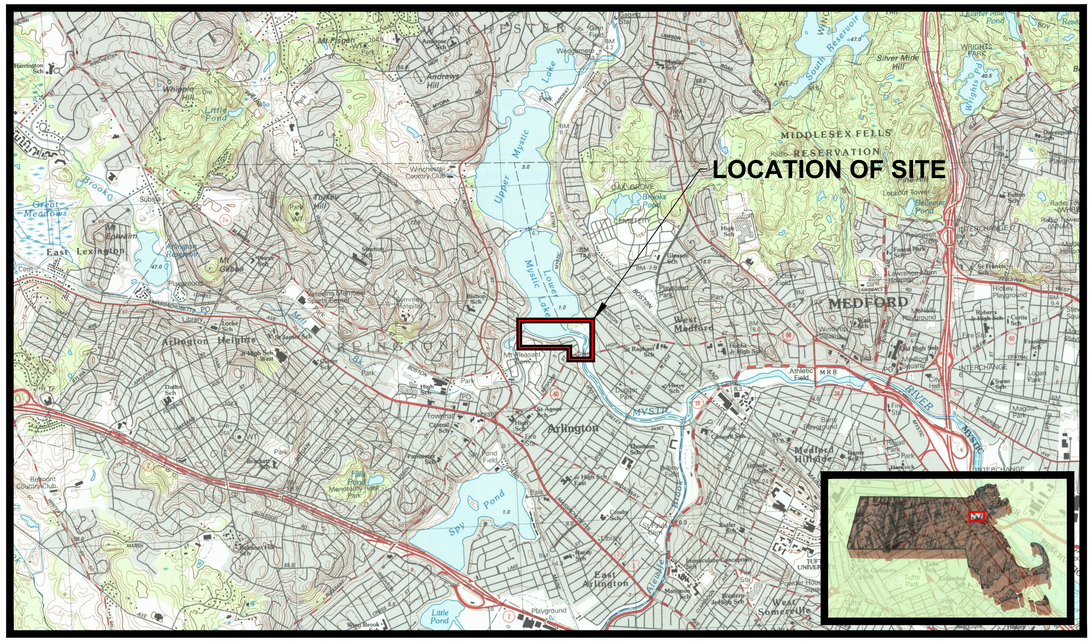
ARLINGTON

MIDDLESEX COUNTY

CONTRACT NO. P17-2724-X2A

AS-BUILT

DRAWING INDEX	
SHEET NO.	**SHEET TITLE**
1	TITLE SHEET
2	LEGEND & GENERAL NOTES
3	SITE LOCATION PLAN
4	EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 1 OF 3)
5	EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 2 OF 3)
6	EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 3 OF 3)
7	EXCAVATION PLAN (SHEET 1 OF 3)
8	EXCAVATION PLAN (SHEET 2 OF 3)
9	EXCAVATION PLAN (SHEET 3 OF 3)
10	RESTORATION PLAN (SHEET 1 OF 3)
11	RESTORATION PLAN (SHEET 2 OF 3)
12	RESTORATION PLAN (SHEET 3 OF 3)
13	RESTORATION CROSS SECTIONS (SHEET 1 OF 3)
14	RESTORATION CROSS SECTIONS (SHEET 2 OF 3)
15	RESTORATION CROSS SECTIONS (SHEET 3 OF 3)
16	SITE PREPARATION & EROSION CONTROL DETAILS
17	RESTORATION DETAILS
18	PLANTING DETAILS



BOSTON NORTH, MASSACHUSETTS
7.5 X 15 MINUTE QUADRANGLE
SOURCE: USGS TOPOGRAPHIC, 1985

SITE LOCATION MAP

NOT TO SCALE

SEE ENGINEER'S CERTIFICATION

ENGINEER'S CERTIFICATION:

THE UNDERSIGNED HEREBY CERTIFIES THIS PLAN TO BE AN APPROPRIATE REPRESENTATION OF THE AS-BUILT SITE GRADING AND SITE FEATURES.

COMMONWEALTH OF MASSACHUSETTS
8/7/23
RANDALL M. TWISS
CIVIL
No. 49206
RMT
REGISTERED PROFESSIONAL ENGINEER

DATE	DESCRIPTION	REV #
5/23/2023	AS-BUILT	REV 1

AECOM
AECOM TECHNICAL SERVICES, Inc.
250 Apollo Drive
Chelmsford, Massachusetts
01824
T 978.905.2100
F 978.905.2101 **www.aecom.com**

dcr Massachusetts

RECOMMENDED FOR APPROVAL

Randall Twiss 8/7/23

CHIEF ENGINEER **DATE**

APPROVED

DCR ADMINISTRATOR **DATE**

TITLE SHEET.DWG Plotted on 23-May-2023 3:10 PM

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	2	18
	CONTRACT NO. P17-2724-X2A		

LEGEND & GENERAL NOTES

LEGEND

LINETYPES

- 100 FT BUFFER ZONE
- 200 FT RIVERFRONT AREA
- BANK LINE
- BITUMINOUS SIDEWALK
- COMPOST FILTER SOCKS
- EXCAVATED MATERIAL STOCKPILE
- EXISTING GRADE 1' CONTOURS
- EXISTING GRADE 5' CONTOURS
- EXISTING STORM DRAIN (PLAN VIEW)
- EXISTING STORM DRAIN (CROSS SECTION VIEW)
- FEMA 100 YEAR FLOODPLAIN (EL. 7, NAVD88)
- GRANITE CURB
- MYSTIC RIVER FLOW
- NON-WOVEN GEOTEXTILE
- PROPOSED GRADE 1' CONTOURS
- PROPOSED GRADE 5' CONTOURS
- PROPOSED STORM DRAIN (PLAN VIEW)
- PROPOSED STORM DRAIN (CROSS SECTION VIEW)
- SAW CUT LINE
- SILT CURTAIN
- STEEL VEHICULAR GUARDRAIL
- SURVEY EDGE OF WATER
- TEMPORARY CONSTRUCTION FENCE

HATCHES

- AASHTO #57 STONE
- GRAVEL BORROW
- JUTE MATTING
- PLANTING SUBSTRATE
- PROPOSED STAGING AREA
- RIPRAP

SYMBOLS

- B4–5 BANK FLAGS
- BENCHMARK
- CATCH BASIN
- DESIGN CONTROL POINTS
- EHH ELECTRIC HANDHOLE
- EMH ELECTRIC MANHOLE
- EXISTING OUTFALL INVERT (PIPE FOUND)
- EXISTING OUTFALL INVERT (PIPE NOT FOUND)
- EXISTING SITE VEGETATION
- EXISTING SITE VEGETATION TO BE REMOVED
- HUB / MAG NAIL
- LPL LIGHT POLE

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
APPROX	APPROXIMATE
BM	BENCHMARK
CB	CATCH BASIN
DCR	DEPARTMENT OF CONSERVATION AND RECREATION
DIA	DIAMETER
E	EASTING
EHH	ELECTRICAL HANDHOLE
EL OR ELEV	ELEVATION
EMH	ELECTRIC MANHOLE
FED	FEDERAL
FEMA	FEDERAL EMERGENCY MANAGEMENT ACT
FES	FLARED END SECTION
FT	FEET
H:V	HORIZONTAL:VERTICAL
HOR	HORIZONTAL
IN	INCH
INV	INVERT
LPL	LIGHTPOLE
MA	MASSACHUSSETS
MASSDOT	MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
NAVD88	NORTH AMERICAN VERTICAL DATUM, 1988
NO	NUMBER
NTS	NOT TO SCALE
OD	OUTER DIAMETER
OF	OUTFALL
OZ/SY	OUNCES PER SQUARE YARD
PROJ	PROJECT
RCP	REINFORCED CONCRETE PIPE
SHT	SHEET
STA	STATION
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE
VER	VERTICAL

GENERAL NOTES:

1. CONSTRUCTION DRAWINGS (DRAWINGS) ARE ONLY A COMPONENT OF THE CONTRACT DOCUMENTS FOR THE OUTFALL RESTORATION PROJECT ASSOCIATED WITH MYSTIC VALLEY PARKWAY STORMWATER MANAGEMENT ALONG LOWER MYSTIC LAKE. THE CONTRACTOR IS RESPONSIBLE FOR ALL FEDERAL, STATE, LOCAL AND OSHA REQUIREMENTS AND FOR PERFORMING ALL ACTIVITIES AS IDENTIFIED IN THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF ALL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT.
3. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION RELATED ACTIVITIES WITH THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION & RECREATION (DCR).
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PROPERTY LINES, VERTICAL DATUM, AND LOCATIONS OF UTILITIES, AND OTHER EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION ACTIVITIES.
5. LOCATION OF ALL EXISTING UTILITIES AND SUBSURFACE STRUCTURES ARE CONSIDERED APPROXIMATE AS TO BOTH SIZE AND LOCATION, AND ARE INDICATED ON DRAWINGS TO GIVE THE BIDDERS A GENERAL IDEA OF EXISTING CONDITIONS TO BE INVESTIGATED BY THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT BIDDERS WILL NOT RELY ON DRAWINGS FOR SUCH INFORMATION, BUT THAT EACH BIDDER SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS AND UTILITY COMPANIES AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 1-888-344-7233 AT LEAST 3 DAYS IN ADVANCE BUT NOT MORE THAN 10 DAYS PRIOR TO INITIATING CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ARLINGTON TO MARK ALL CITY/TOWN-OWNED WATER, SEWER, AND DRAINAGE UTILITIES PRIOR TO PERFORMING ANY INTRUSIVE ACTIVITIES.
7. DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY, BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES ELEVATIONS FOR THE CONTRACTIBILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED.
8. IF THE CONTRACTOR DAMAGES UTILITY SERVICES, HE SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL IMMEDIATELY REPLACE OR REPAIR, UNLESS INDICATED OTHERWISE BY THE RESPECTIVE UTILITY OWNER.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF ANY TEMPORARY UTILITIES REQUIRED TO FACILITATE CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO: ELECTRICITY, SANITARY FACILITIES, WATER, TELEPHONE/FAX, ETC.
10. THE CONTRACTOR SHALL PROVIDE ROADSIDE TREE PROTECTION OR INDIVIDUAL TREE PROTECTION ALONG THE LIMITS OF CLEARING AND GRUBBING TO PROTECT EXISTING STANDS OF QUALITY VEGETATION FROM CONSTRUCTION ACTIVITIES AND FROM EQUIPMENT AND MATERIALS BEING STORED ADJACENT TO TREE TRUNKS. RESIDENT ENGINEER AND DCR LANDSCAPE ARCHITECT SHALL REVIEW TREE PROTECTION AND FENCING PRIOR TO START OF ANY MOBILIZATION OR CONSTRUCTION ACTIVITIES.
11. IT IS DCR'S INTENT TO PRESERVE VEGETATION AND TREES TO THE MAXIMUM EXTENT POSSIBLE.
12. WORK ACTIVITIES SHALL BE CONDUCTED BETWEEN 7:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY UNLESS OTHERWISE AUTHORIZED BY DCR.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE WORK AREA BOTH DURING AND AFTER THE HOURS OF CONSTRUCTION AND UNTIL THE SITE IS RESTORED. SECURITY MEASURES MAY INCLUDE TEMPORARY CONSTRUCTION FENCING, SIGNS AND, IF NECESSARY, BARRICADES TO LIMIT SITE ACCESS. ADDITIONAL MEASURES MAY BE INSTALLED AT THE DIRECTION OF DCR AND/OR ENGINEER IN ORDER TO ENSURE A SAFE WORKING ENVIRONMENT.
14. EXISTING TOPOGRAPHIC SURVEY IS BASED ON THE SURVEY OF MYSTIC VALLEY PARKWAY PREPARED BY HANCOCK ASSOCIATES ON AUGUST 20, 2018.
15. THE DRAWINGS DATUM:
    HORIZONTAL: MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NAD 1983, MAINLAND ZONE, U.S. FEET.
    VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, U.S. FEET).
16. ALL EXISTING TOPOGRAPHY WITHIN THE CONSTRUCTION LIMITS SHALL BE RETAINED UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER.
17. AREAS OUTSIDE THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
18. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT AUTHORIZATION FROM THE ENGINEER.
19. DAMAGE OF PROPERTY BEYOND THE WORK LIMITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, SUBJECT TO THE APPROVAL OF THE ENGINEER AND ACCEPTANCE OF THE PROPERTY OWNER.
20. ALL NON-PRECAST CEMENT CONCRETE USED ON THIS PROJECT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI OR AS OTHERWISE SPECIFIED ON THE DRAWINGS.
21. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS AT HIS OWN EXPENSE IF NOT OTHERWISE SPECIFIED.
22. THE LOCATIONS OF PROPOSED PIPELINES, STRUCTURES AND UTILITY RELOCATIONS MAY BE MODIFIED TO SUIT FIELD CONDITIONS AT THE DISCRETION OF THE ENGINEER. OFFSETS TO DRAINAGE STRUCTURES ARE TO THE CENTER OF THE FRAME OR GRATE. INVERT ELEVATIONS MAY BE SUBJECT TO FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
23. SAFETY CONTROLS FOR CONSTRUCTION OPERATIONS SHALL BE IN ACCORDANCE WITH MASSDOT REQUIREMENTS, THE 2009 MUTCD AS AMENDED.
24. ALL PROPOSED DRAINAGE CONNECTIONS TO EXISTING PIPES WILL BE INCLUDED IN THE COST OF INSTALLATION OF THE NEW PIPE OR STRUCTURE.
25. WHEN A PROPOSED PIPE OR STRUCTURE INTERFERES WITH ANY UNDERGROUND UTILITY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
26. ALL EXISTING DRAINAGE STRUCTURES AND PIPE TO REMAIN IN PLACE SHALL BE CLEANED AND SEDIMENTS DISPOSED OF.
27. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESEEDED PRIOR TO THE END OF THE PROJECT.
28. ALL TRENCH BACKFILL SHALL BE MECHANICALLY TAMPED; NO JETTING SHALL BE ALLOWED.
29. IF DURING THE WORK, THE PRESENCE OF POTENTIALLY HAZARDOUS MATERIALS OR CONDITIONS IS EVIDENT, WORK IN THE AREA SHALL BE SUSPENDED, WITH IMMEDIATE NOTIFICATION TO DCR. THESE CONDITIONS INCLUDE, BUT ARE NOT LIMITED TO, ENCOUNTERING BURIED CONTAINERS, DRUMS, OR TANKS. THE AREA WILL BE SECURED TO PREVENT THE EXISTENCE OF A HEALTH RISK OR RELEASE INTO THE ENVIRONMENT. THE SOURCES OF THE EVENT CAUSING THE MATERIAL TO BE CONSIDERED SUSPECT WILL BE EVALUATED BY DCR. IN THE EVENT THAT BURIED CONTAINERS, DRUMS, OR TANKS ARE ENCOUNTERED OR IF A RELEASE OF OIL OR POTENTIALLY HAZARDOUS MATERIALS HAS OCCURRED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER, DCR, AND MASSDEP INCIDENT RESPONSE WITHIN THE REQUIRED REPORTING TIME PERIOD. THE REMOVAL OF BURIED TANKS, CONTAINERS, OR DRUMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF 520 CMR 9.00 TANKS AND CONTAINERS.
30. REMOVAL AND REPLACEMENT OF GUARDRAIL SECTIONS AND POSTS SHALL BE CONSIDERED INCIDENTAL TO WORK AND NO ADDITIONAL FUNDING WILL BE AWARDED FOR SUCH WORK.
31. ALL WORK SHALL BE IN ACCORDANCE WITH MOST CURRENT VERSION OF MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL DEVELOP A WORK PLAN WHICH INCLUDES A CONSTRUCTION SEQUENCING AND STAGING PLAN, DEWATERING, EXCAVATION METHODS, AND TRAFFIC MANAGEMENT PLAN. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL THE WORK PLAN HAS BEEN APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL CONFINE CONSTRUCTION ACTIVITIES TO AREAS DEFINED BY THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PRESERVE LAND RESOURCES WITHIN THE PROJECT SITE BOUNDARIES AND OUTSIDE LIMITS OF THE WORK AS MAY BE AFFECTED BY THE WORK OF THIS CONTRACT IN THEIR PRESENT CONDITION, OR RESTORE THOSE AFFECTED TO A CONDITION AFTER COMPLETION OF CONSTRUCTION THAT WILL APPEAR TO BE NATURAL.
3. THE CONTRACTOR SHALL RESTORE TREES OR LANDSCAPE FEATURES SCARRED OR DAMAGED BY EQUIPMENT OR OPERATIONS AS NEARLY AS POSSIBLE TO ORIGINAL CONDITION. THE CONTRACTOR SHALL NOT DEFACE, INJURE OR DESTROY TREES OR SHRUBS, NOR REMOVE OR CUT THEM WITHOUT WRITTEN PERMISSION FROM DCR. THE CONTRACTOR SHALL PROTECT MONUMENTS AND MARKERS AT ALL TIMES.
4. THE CONTRACTOR SHALL NOT POLLUTE WATERWAYS. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS CONCERNING POLLUTION OF RIVERS AND STREAMS. THE CONTRACTOR SHALL PERFORM WORK UNDER THIS CONTRACT IN SUCH A MANNER THAT OBJECTIONABLE CONDITIONS WILL NOT BE CREATED ON OR ADJACENT TO PROJECT SITE AREAS.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS AREAS AND OTHER WORK AREAS WITHIN OR BEYOND THE PROJECT SITE BOUNDARIES FREE FROM DUST WHICH WOULD CAUSE A HAZARD OR NUISANCE TO OTHERS. THE CONTRACTOR SHALL PERFORM DUST CONTROL AS THE WORK PROCEEDS AND WHENEVER A NUISANCE OR HAZARD OCCURS.
6. THE CONTRACTOR SHALL PROVIDE METHODS DURING DEWATERING OPERATIONS AND FOR STORM WATER RUNOFF NOT TO ALLOW SILT OR DEBRIS TO ENTER EXISTING DRAINAGE FACILITIES OR CREATE NUISANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING EXISTING OR NEW FACILITIES IF SILTATION OCCURS DUE TO THE CONTRACTOR'S OPERATIONS.
7. THE CONTRACTOR SHALL OBLITERATE SIGNS OF TEMPORARY CONSTRUCTION FACILITIES SUCH AS ROADS, WORK AREAS, STRUCTURES, STOCKPILES OF EXCESS OR WASTE MATERIALS, OR ANY OTHER VESTIGES OF CONSTRUCTION CAUSED BY THE CONTRACTOR UPON PROJECT COMPLETION.
8. THE CONTRACTOR SHALL MAINTAIN FACILITIES CONSTRUCTED, AS APPLICABLE, FOR POLLUTION CONTROL AS LONG AS THE OPERATIONS CREATING THE PARTICULAR POLLUTANT ARE BEING CARRIED OUT, OR UNTIL THE MATERIAL CONCERNED HAS BECOME STABILIZED TO THE EXTENT THAT POLLUTION IS NO LONGER CREATED.
9. THE CONTRACTOR SHALL SCHEDULE AND EXECUTE WORK SO AS TO MINIMIZE DISTURBANCE OF MYSTIC VALLEY PARKWAY TRAFFIC.
10. THE CONTRACTOR SHALL OBTAIN ANY CONSTRUCTION-SPECIFIC PERMITS AND AUTHORIZATIONS REQUIRED FOR THE WORK, PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON DRAWINGS PRIOR TO START OF CONSTRUCTION OR AS DIRECTED BY ENGINEER.THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE MEASURES ON A CONTINUAL BASIS THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS RESTORED AND BECOMES STABILIZED.
2. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN MASSACHUSETTS.
3. THE CONTRACTOR SHALL PROTECT ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE SUBJECT TO EROSION (EITHER NEWLY FILLED OR EXCAVATED). ALL AREAS USED FOR CONTRACTOR STAGING AND ALL TEMPORARY SOIL STOCKPILE AREAS WITH APPROPRIATE EROSION CONTROL MEASURES.
4. EROSION AND SEDIMENT CONTROLS WILL BE REVIEWED BY A QUALIFIED PERSON EMPLOYED BY DCR ONCE EVERY 7 DAYS AND AFTER STORM EVENTS LARGER THAN 0.5 INCHES OF RAIN IN 24-HOURS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING OR ADDING EROSION AND SEDIMENT CONTROL MEASURES AS DIRECTED BY THE DCR'S REPRESENTATIVE.
5. THE CONTRACTOR SHALL EXCAVATE SEDIMENT TRAPPED BEHIND THE BARRIERS WHEN THE SEDIMENT REACHES A DEPTH OF 6 INCHES. REMOVED SEDIMENT SHALL BE REUSED ON SITE AS DIRECTED BY ENGINEER.
6. EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL THE SEEDED AREA BECOMES AT LEAST 75% ESTABLISHED. THE CONTRACTOR SHALL REMOVE THESE CONTROLS AS DESCRIBED IN THE DRAWINGS.
7. THE CONTRACTOR SHALL APPLY MAINTENANCE MEASURES AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, THE CONTRACTOR SHALL VISUALLY INSPECT ALL INSTALLED EROSION CONTROL MEASURES AND REPAIR THOSE NECESSARY TO ENSURE THEIR CONTINUING FUNCTION AS DESIGNED. FOLLOWING THE FINAL PLANTING, THE CONTRACTOR SHALL INSPECT THE SITE EVERY THIRTY DAYS UNTIL THE PLANTS HAVE BEEN 95% ESTABLISHED. IF EROSION OCCURS BEFORE THE PLANTING HAS BECOME ESTABLISHED OR IF THERE ARE AREAS WHERE GROWTH IS INSUFFICIENT, THE CONTRACTOR SHALL REPLANT THESE AREAS AS REQUIRED, AND MAKE FOLLOW-UP INSPECTIONS.
8. FINAL PLANTING OF THE DISTURBED AREAS SHALL OCCUR FROM APRIL 15 AND JUNE1 AND SEPTEMBER 15 AND OCTOBER 15. IF FINAL PLANTINGS OF THE DISTURBED AREAS IS NOT COMPLETED DURING THIS PERIOD, THE CONTRACTOR SHALL GRADE AND SMOOTH THESE AREAS AND PLANT THEM WITH TEMPORARY SEEDING, IN ACCORDANCE WITH MA GUIDELINES OR AS DIRECTED BY DCR. FINAL PLANTING SHALL BE COMPLETED IN THE FOLLOWING PLANTING SEASON.
9. THE CONTRACTOR SHALL PERFORM STREET SWEEPING ON MYSTIC VALLEY PARKWAY AS DIRECTED BY ENGINEER.

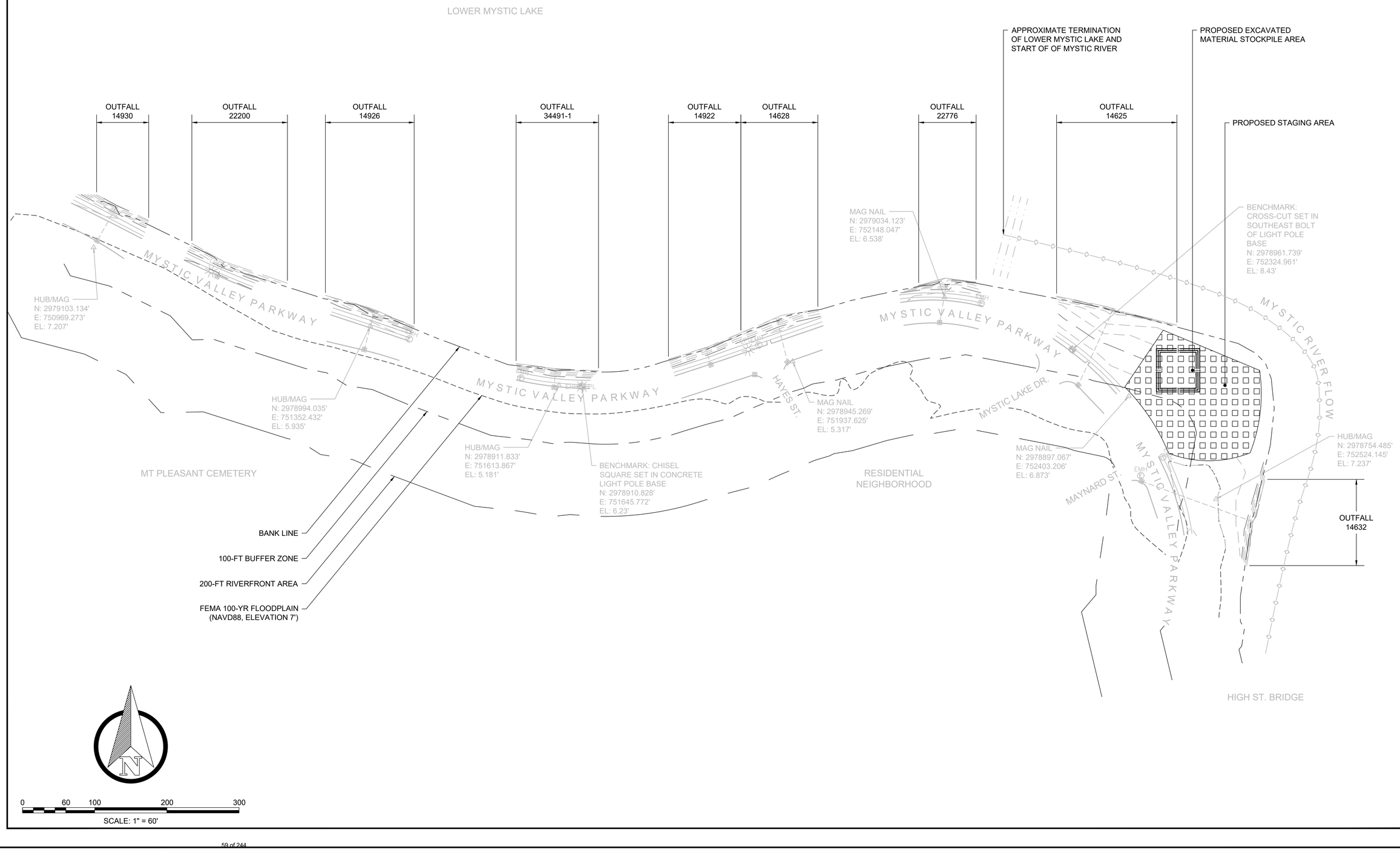
INVASIVE SPECIES CONTROL:

1. FOR A LIST OF INVASIVE AND OTHER UNACCEPTABLE PLANT SPECIES REFER TO THE MASSACHUSETTS INVASIVE PLANT ADVISORY GROUP (MIPAG) EVALUATION OF NON-NATIVE PLANT SPECIES FOR INVASIVENESS IN MASSACHUSETTS (APRIL 1, 2005). PLANT MATERIALS LISTED AS AN INVASIVE SPECIES OR UNACCEPTABLE PLANT SPECIES SHALL NOT BE USED ON THE PROJECT.
2. SOIL MATERIAL BROUGHT TO THE SITE SHALL NOT BE FROM SOURCES KNOWN TO CONTAIN INVASIVE SPECIES.
3. SOIL EXCAVATED AND REMOVED THAT CONTAINS INVASIVE PLANT SEEDS OR FRAGMENTS SHOULD BE TREATED AS CONTAMINATED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF THIS MATERIAL.

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	3	18
	CONTRACT NO. P17-2724-X2A		

SITE LOCATION PLAN



SITE LOCATION PLAN.DWG Plotted on 18-Sep-2023 1:04 PM

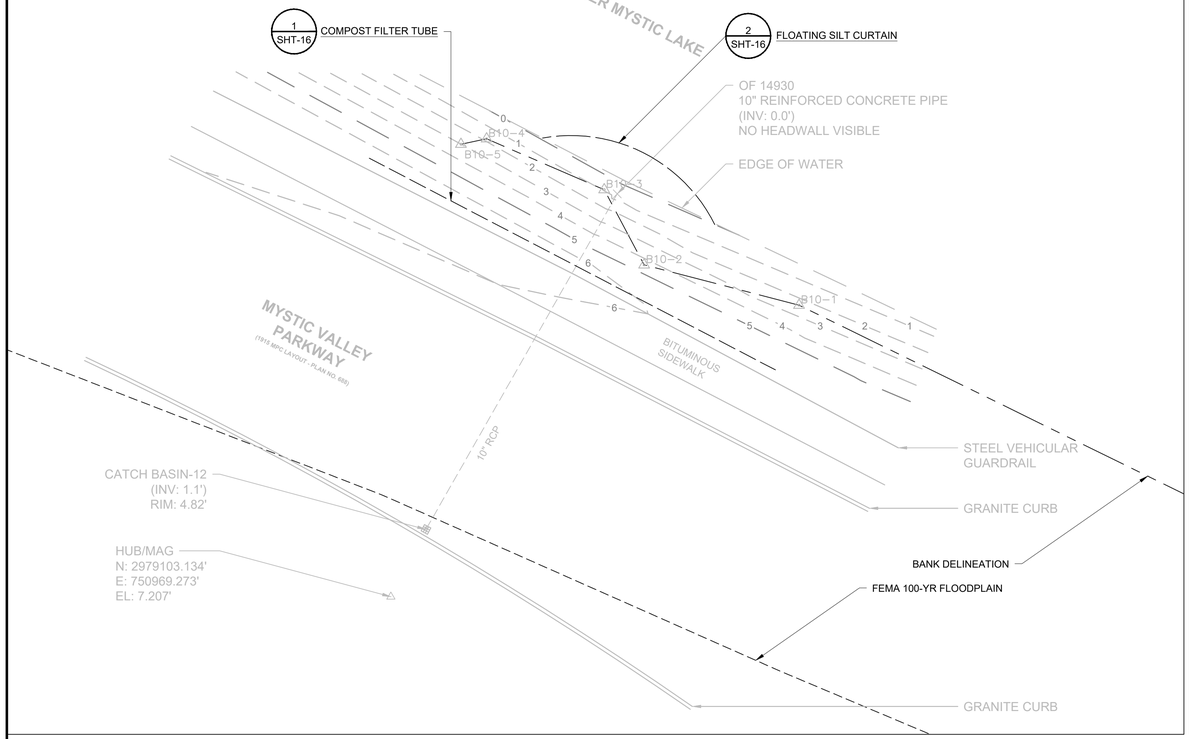
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	4	18
CONTRACT NO. P17-2724-X2A			

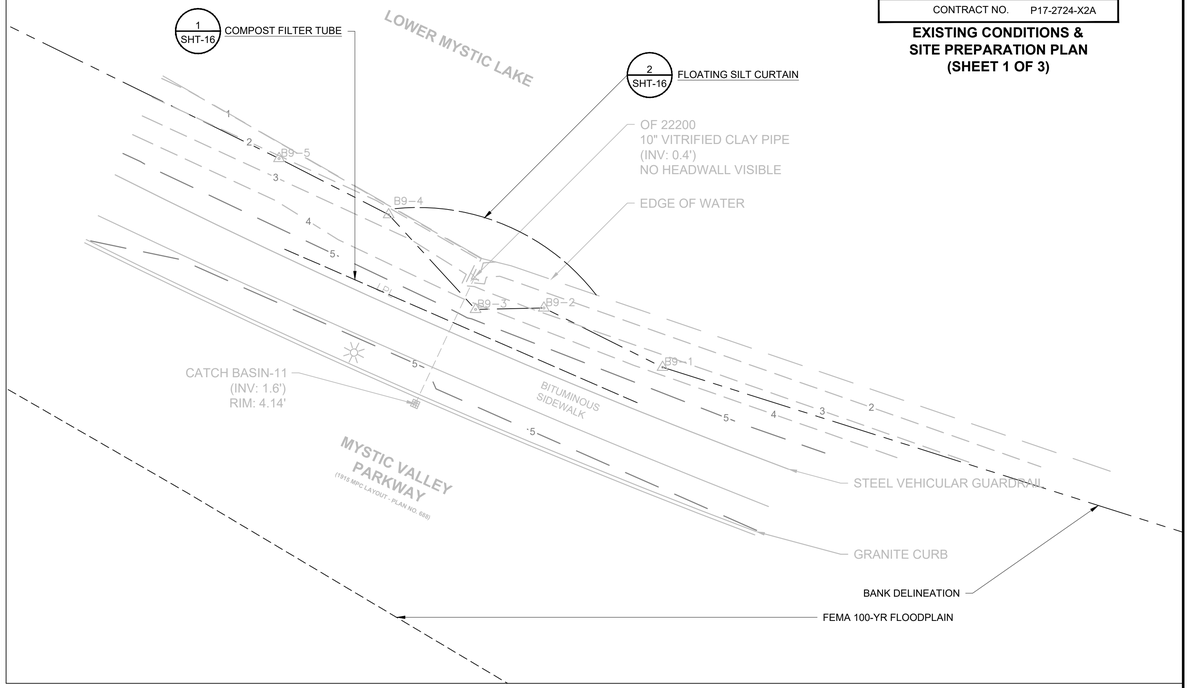
EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 1 OF 3)

EXISTING CONDITIONS.DWG Plotted on 24-May-2023 9:08 AM

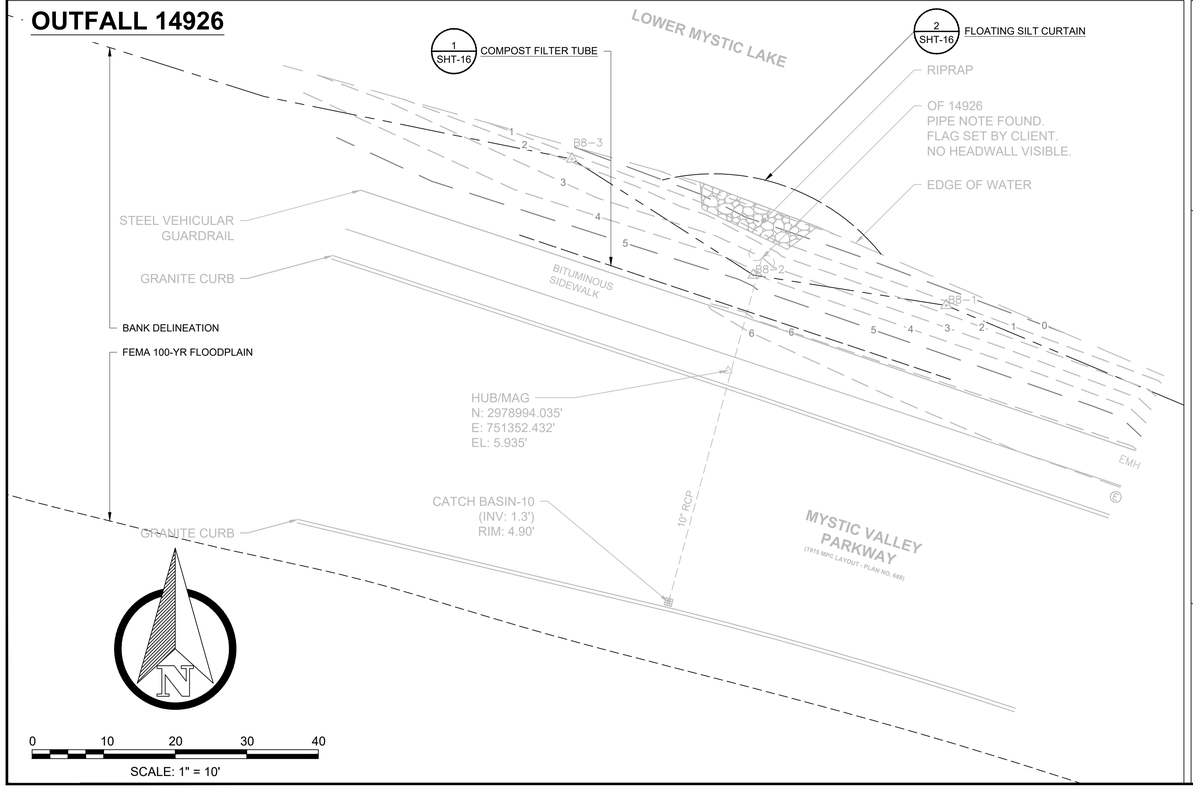
OUTFALL 14930



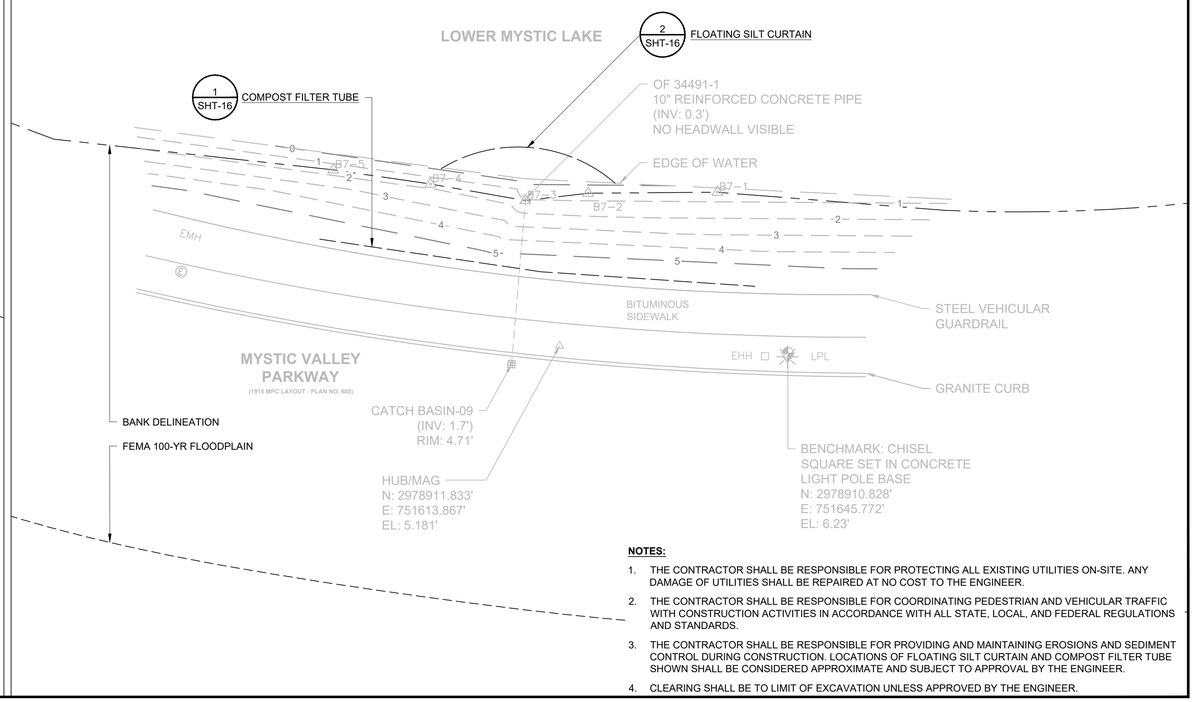
OUTFALL 22200



OUTFALL 14926



OUTFALL 34494-1

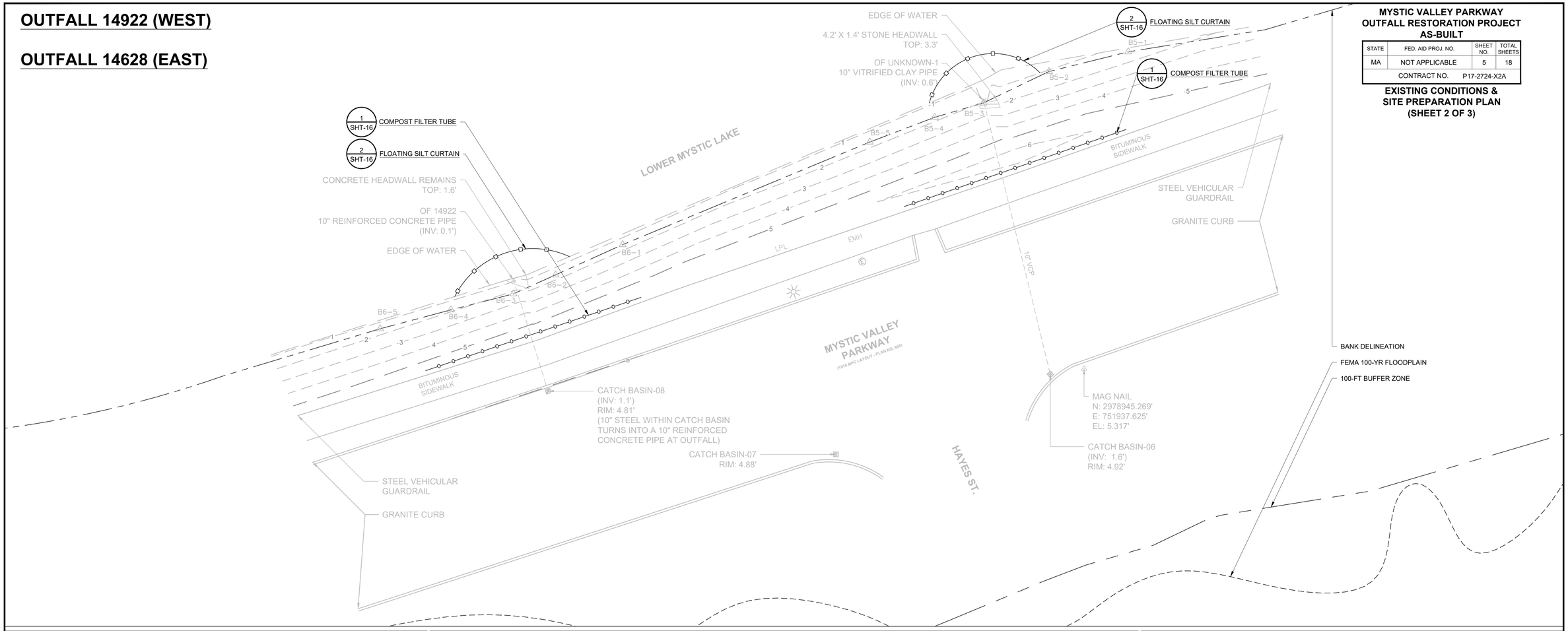


NOTES:

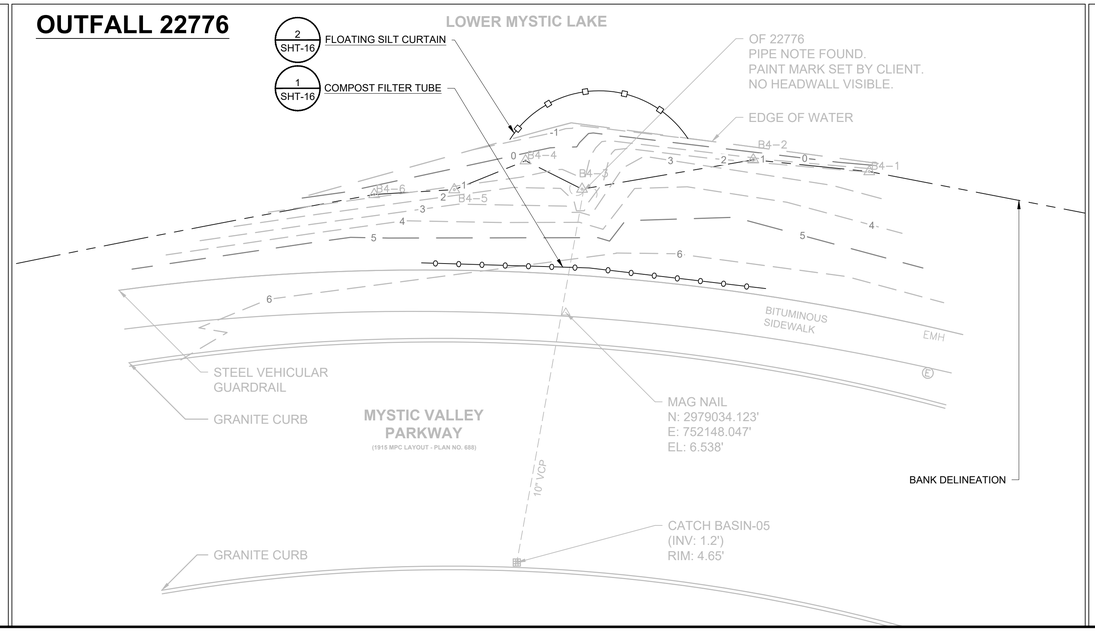
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES ON-SITE. ANY DAMAGE OF UTILITIES SHALL BE REPAIRED AT NO COST TO THE ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING PEDESTRIAN AND VEHICULAR TRAFFIC WITH CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH ALL STATE, LOCAL, AND FEDERAL REGULATIONS AND STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING EROSIONS AND SEDIMENT CONTROL DURING CONSTRUCTION. LOCATIONS OF FLOATING SILT CURTAIN AND COMPOST FILTER TUBE SHOWN SHALL BE CONSIDERED APPROXIMATE AND SUBJECT TO APPROVAL BY THE ENGINEER.
4. CLEARING SHALL BE TO LIMIT OF EXCAVATION UNLESS APPROVED BY THE ENGINEER.

OUTFALL 14922 (WEST)

OUTFALL 14628 (EAST)



OUTFALL 22776



0 10 20 30 40

SCALE: 1" = 10'

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	5	18
	CONTRACT NO. P17-2724-X2A		

EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 2 OF 3)

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES ON-SITE. ANY DAMAGE OF UTILITIES SHALL BE REPAIRED AT NO COST TO THE ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING PEDESTRIAN AND VEHICULAR TRAFFIC WITH CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH ALL STATE, LOCAL, AND FEDERAL REGULATIONS AND STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING EROSIONS AND SEDIMENT CONTROL DURING CONSTRUCTION. LOCATIONS OF FLOATING SILT CURTAIN AND COMPOST FILTER TUBE SHOWN SHALL BE CONSIDERED APPROXIMATE AND SUBJECT TO APPROVAL BY THE ENGINEER.
4. CLEARING SHALL BE TO LIMIT OF EXCAVATION UNLESS APPROVED BY THE ENGINEER.

EXISTING CONDITIONS.DWG Plotted on 18-Sep-2023 1:08 PM

OUTFALL 14625

2.6' x 0.6' CONCRETE HEADWALL
TOP: 2.0'
(REMAINS OF 10" VITRIFIED CLAY PIPE)

MYSTIC RIVER → FLOW →

OF 14625
10" VITRIFIED CLAY PIPE
(INV: - 0.1' ±)

EDGE OF WATER

2 SHT-16 FLOATING SILT CURTAIN

1 SHT-16 COMPOST FILTER TUBE

B3 – 5
B3 – 4
B3 – 3
B3 – 2
B3 – 1

BENCHMARK: CROSS-CUT
SET IN SOUTHEAST BOLT
OF LIGHT POLE BASE
N: 2978961.738'
E: 752324.961'
EL: 8.43'

GRANITE CURB

3 SHT-16 TEMPORARY CONSTRUCTION FENCE

1 SHT-16 COMPOST FILTER TUBE

STAGING AREA

BANK DELINEATION

100-FT BUFFER ZONE

MYSTIC VALLEY PARKWAY
(1915 MDC LAYOUT - PLAN NO 688)

BITUMINOUS SIDEWALK

10" VCP

MYSTIC LAKE DR.

CATCH BASIN-04
(INV: 1.8')
RIM: 4.99'

GRANITE CURB

MAG NAIL
N: 2978897.067'
E: 752403.206'
EL: 6.873'

GRANITE CURB

N

0 10 20 30 40

SCALE: 1" = 10'

OUTFALL 14632

EMH

CATCH BASIN-01
(INV: 2.3')
RIM: 5.20'

MAYNARD ST.

BITUMINOUS SIDEWALK

HUB/MAG
N: 2978754.485'
E: 752524.145'
EL: 7.237'

STAGING AREA

1 SHT-16 COMPOST FILTER TUBE

1 SHT-16 COMPOST FILTER TUBE

2 SHT-16 FLOATING SILT CURTAIN

MYSTIC VALLEY PARKWAY
(1915 MDC LAYOUT - PLAN NO 688)

B2 – 4
B2 – 3
B2 – 2
B2 – 1

MYSTIC RIVER → FLOW →

OF 14632
10" VITRIFIED CLAY PIPE
(INV: 0.9')

3.6' X 0.9'
CONCRETE
HEADWALL
TOP: 3.3'

EDGE OF WATER

GRANITE CURB

FEMA 100-YR FLOODPLAIN

BANK DELINEATION

100-FT BUFFER ZONE

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES ON-SITE. ANY DAMAGE OF UTILITIES SHALL BE REPAIRED AT NO COST TO THE ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING PEDESTRIAN AND VEHICULAR TRAFFIC WITH CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH ALL STATE, LOCAL, AND FEDERAL REGULATIONS AND STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING EROSIONS AND SEDIMENT CONTROL DURING CONSTRUCTION. LOCATIONS OF FLOATING SILT CURTAIN AND COMPOST FILTER TUBE SHOWN SHALL BE CONSIDERED APPROXIMATE AND SUBJECT TO APPROVAL BY THE ENGINEER.
4. CLEARING SHALL BE TO LIMIT OF EXCAVATION UNLESS APPROVED BY THE ENGINEER.

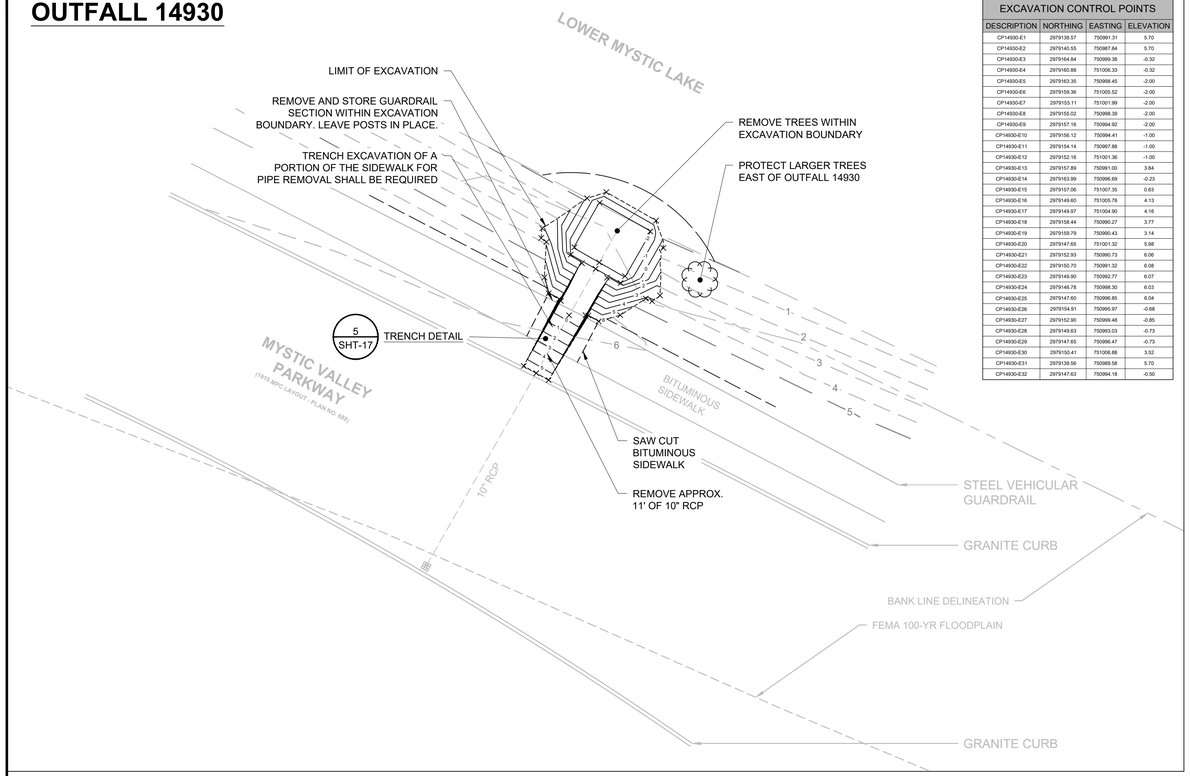
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	6	18
	CONTRACT NO. P17-2724-X2A		

EXISTING CONDITIONS & SITE PREPARATION PLAN (SHEET 3 OF 3)

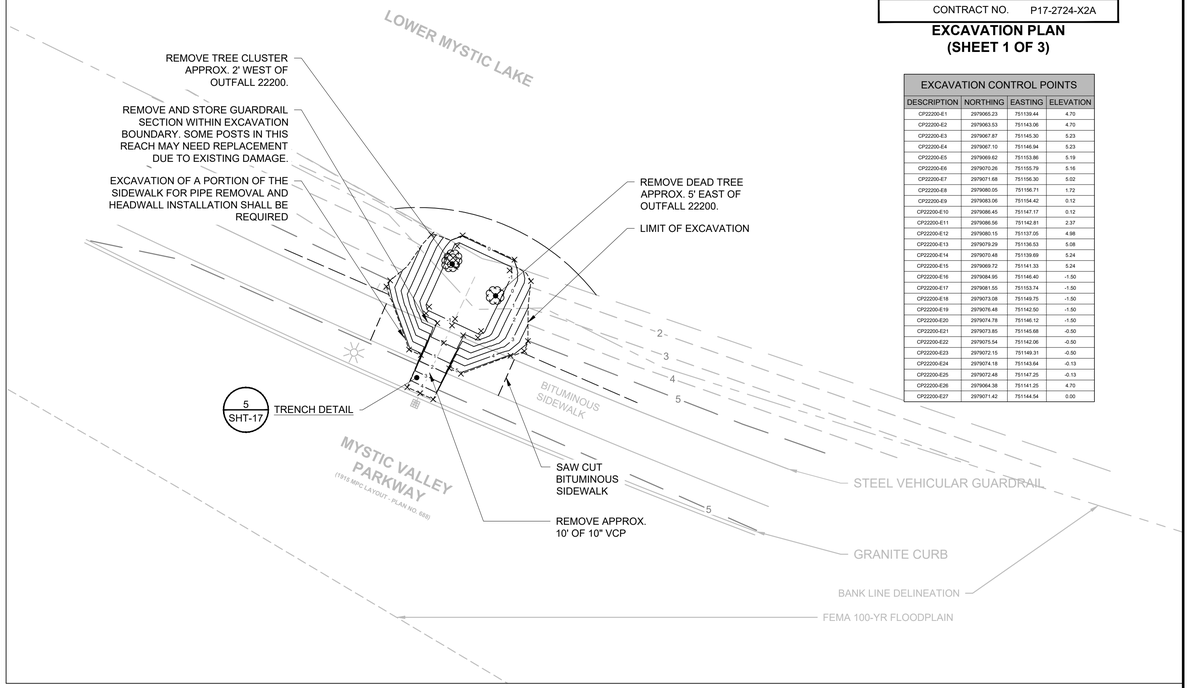
EXISTING CONDITIONS.DWG Plotted on 24-May-2023 9:08 AM

OUTFALL 14930



EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14930-E1	2979138.57	750991.31	5.70
CP14930-E2	2979140.55	750987.84	5.70
CP14930-E3	2979164.84	750999.38	-0.32
CP14930-E4	2979160.88	751006.33	-0.32
CP14930-E5	2979163.35	750999.45	-2.00
CP14930-E6	2979159.36	751005.52	-2.00
CP14930-E7	2979153.11	751001.99	-2.00
CP14930-E8	2979155.02	750998.39	-2.00
CP14930-E9	2979157.16	750994.92	-2.00
CP14930-E10	2979156.12	750994.41	-1.00
CP14930-E11	2979154.14	750997.88	-1.00
CP14930-E12	2979152.16	751001.36	-1.00
CP14930-E13	2979157.89	750991.00	3.84
CP14930-E14	2979163.99	750986.89	-0.23
CP14930-E15	2979157.06	751007.35	0.63
CP14930-E16	2979149.60	751005.78	4.13
CP14930-E17	2979149.97	751004.90	4.16
CP14930-E18	2979158.44	750992.27	3.77
CP14930-E19	2979159.79	750990.43	3.14
CP14930-E20	2979147.65	751001.32	5.98
CP14930-E21	2979152.93	750990.73	6.06
CP14930-E22	2979150.70	750991.32	6.08
CP14930-E23	2979149.90	750992.77	6.07
CP14930-E24	2979146.78	750998.30	6.03
CP14930-E25	2979147.60	750996.85	6.04
CP14930-E26	2979154.91	750995.97	-0.68
CP14930-E27	2979152.90	750999.48	-0.85
CP14930-E28	2979149.63	750993.03	-0.73
CP14930-E29	2979147.65	750996.47	-0.73
CP14930-E30	2979150.41	751006.88	3.52
CP14930-E31	2979139.56	750993.58	5.70
CP14930-E32	2979147.63	750994.18	-0.50

OUTFALL 22200



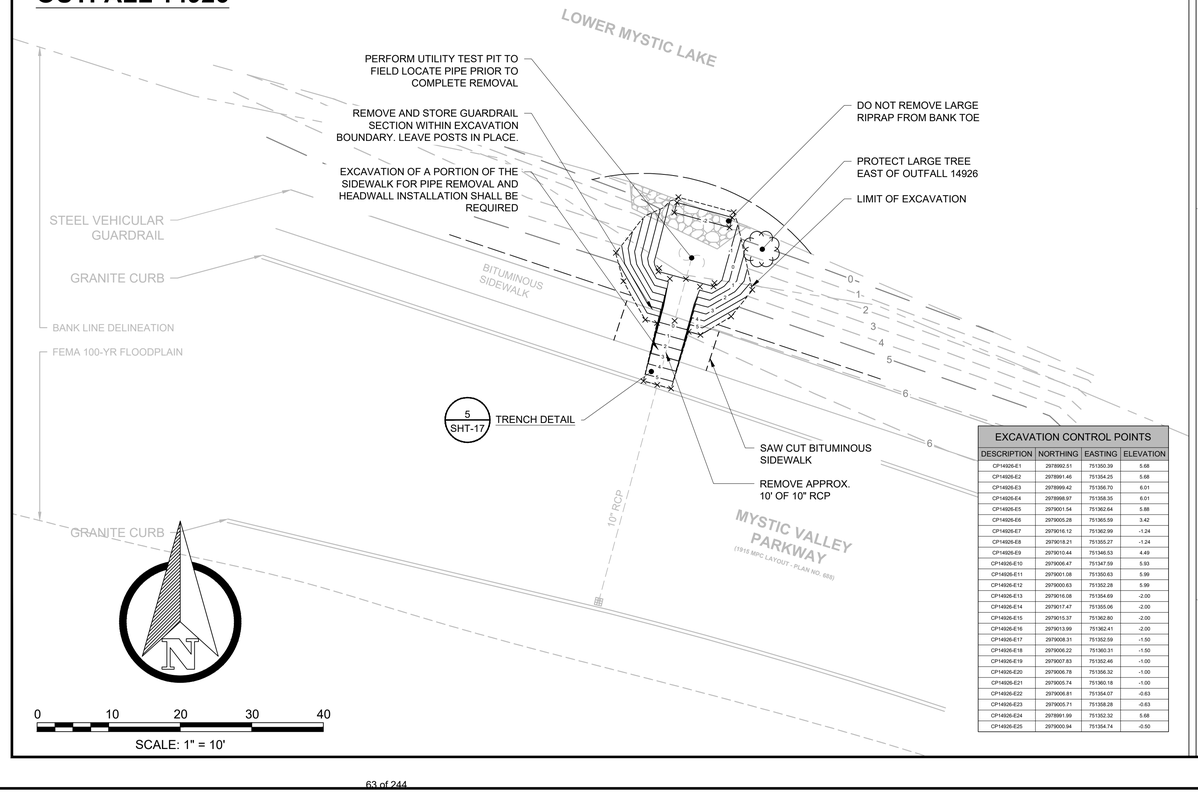
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	7	18
	CONTRACT NO. P17-2724-X2A		

EXCAVATION PLAN (SHEET 1 OF 3)

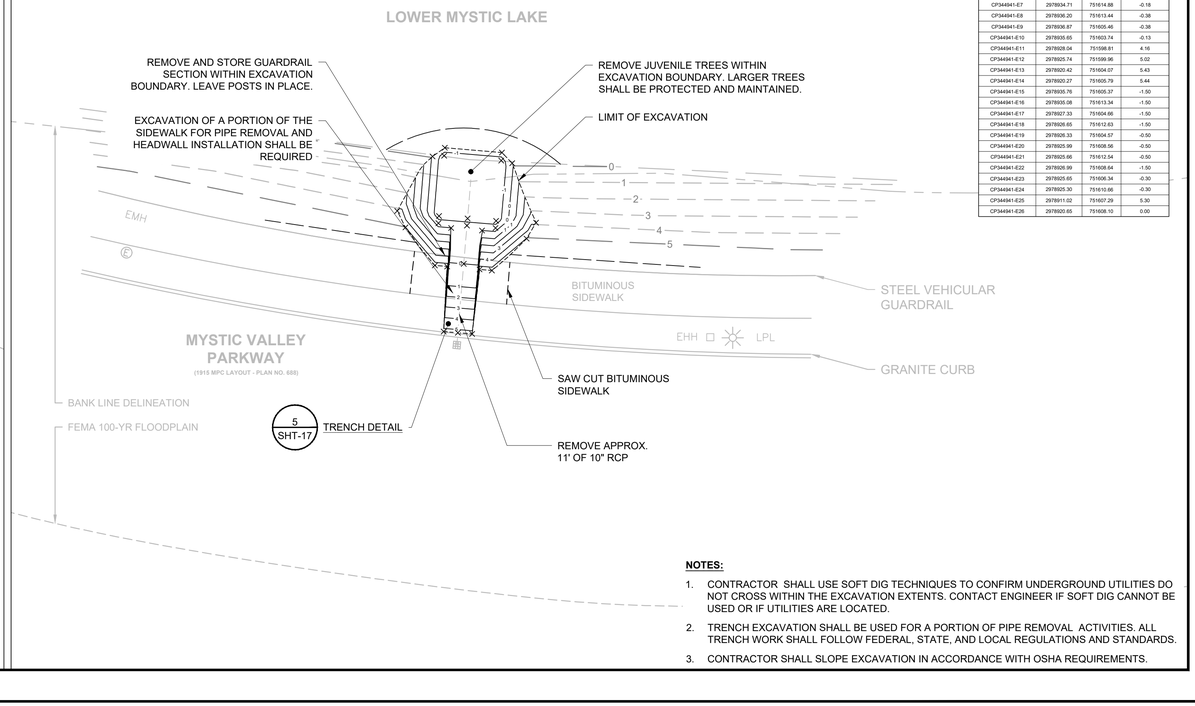
EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP22200-E1	2979065.23	751139.44	4.70
CP22200-E2	2979063.53	751143.06	4.70
CP22200-E3	2979067.87	751145.30	5.23
CP22200-E4	2979067.10	751146.94	5.23
CP22200-E5	2979069.62	751153.86	5.19
CP22200-E6	2979070.26	751155.79	5.16
CP22200-E7	2979071.68	751156.30	5.02
CP22200-E8	2979080.05	751156.71	1.72
CP22200-E9	2979083.06	751154.42	0.12
CP22200-E10	2979086.45	751147.17	0.12
CP22200-E11	2979086.56	751142.81	2.37
CP22200-E12	2979080.15	751137.05	4.98
CP22200-E13	2979079.29	751136.53	5.08
CP22200-E14	2979070.48	751139.69	5.24
CP22200-E15	2979069.72	751141.33	5.24
CP22200-E16	2979084.95	751146.40	-1.50
CP22200-E17	2979081.55	751153.74	-1.50
CP22200-E18	2979073.08	751149.75	-1.50
CP22200-E19	2979076.48	751142.50	-1.50
CP22200-E20	2979074.78	751146.12	-1.50
CP22200-E21	2979073.85	751145.68	-0.50
CP22200-E22	2979073.54	751142.06	-0.50
CP22200-E23	2979072.15	751149.31	-0.50
CP22200-E24	2979074.18	751143.64	-0.13
CP22200-E25	2979072.48	751147.25	-0.13
CP22200-E26	2979084.38	751141.25	4.70
CP22200-E27	2979071.42	751144.54	0.00

OUTFALL 14926



EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14926-E1	2978992.51	751350.39	5.68
CP14926-E2	2978991.46	751354.25	5.68
CP14926-E3	2978999.42	751356.70	6.01
CP14926-E4	2978998.97	751358.35	6.01
CP14926-E5	2979001.54	751362.64	5.88
CP14926-E6	2979005.28	751365.59	3.42
CP14926-E7	2979016.12	751362.99	-1.24
CP14926-E8	2979018.21	751355.27	-1.24
CP14926-E9	2979010.44	751346.53	4.49
CP14926-E10	2979006.47	751347.59	5.93
CP14926-E11	2979001.08	751350.63	5.99
CP14926-E12	2979000.63	751352.28	5.99
CP14926-E13	2979016.08	751354.69	-2.00
CP14926-E14	2979017.47	751355.06	-2.00
CP14926-E15	2979015.37	751362.80	-2.00
CP14926-E16	2979013.99	751362.41	-2.00
CP14926-E17	2979008.31	751352.59	-1.50
CP14926-E18	2979006.22	751360.31	-1.50
CP14926-E19	2979007.83	751352.46	-1.00
CP14926-E20	2979006.78	751356.32	-1.00
CP14926-E21	2979005.74	751360.18	-1.00
CP14926-E22	2979006.81	751354.07	-0.63
CP14926-E23	2979005.71	751358.28	-0.63
CP14926-E24	2978991.99	751352.32	5.68
CP14926-E25	2979000.94	751354.74	-0.50

OUTFALL 34494-1



EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP34494-E1	2978911.18	751605.30	5.30
CP34494-E2	2978910.85	751609.28	5.30
CP34494-E3	2978919.87	751613.32	5.45
CP34494-E4	2978919.72	751612.04	5.46
CP34494-E5	2978924.17	751616.89	5.07
CP34494-E6	2978926.40	751618.21	3.87
CP34494-E7	2978934.71	751614.88	-0.16
CP34494-E8	2978936.20	751613.44	-0.38
CP34494-E9	2978936.87	751605.46	-0.38
CP34494-E10	2978935.65	751603.74	-0.13
CP34494-E11	2978928.04	751598.81	4.16
CP34494-E12	2978925.74	751599.96	5.02
CP34494-E13	2978920.42	751604.07	5.43
CP34494-E14	2978920.27	751605.79	5.44
CP34494-E15	2978935.76	751605.37	-1.50
CP34494-E16	2978935.08	751613.34	-1.50
CP34494-E17	2978927.33	751604.66	-1.50
CP34494-E18	2978926.65	751612.63	-1.50
CP34494-E19	2978926.33	751604.57	-0.50
CP34494-E20	2978925.99	751608.56	-0.50
CP34494-E21	2978925.66	751612.54	-0.50
CP34494-E22	2978926.99	751608.64	-1.50
CP34494-E23	2978925.65	751606.34	-0.30
CP34494-E24	2978925.30	751610.66	-0.30
CP34494-E25	2978911.02	751607.29	5.30
CP34494-E26	2978920.65	751608.10	0.00

NOTES:

1. CONTRACTOR SHALL USE SOFT DIG TECHNIQUES TO CONFIRM UNDERGROUND UTILITIES DO NOT CROSS WITHIN THE EXCAVATION EXTENTS. CONTACT ENGINEER IF SOFT DIG CANNOT BE USED OR IF UTILITIES ARE LOCATED.
2. TRENCH EXCAVATION SHALL BE USED FOR A PORTION OF PIPE REMOVAL ACTIVITIES. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
3. CONTRACTOR SHALL SLOPE EXCAVATION IN ACCORDANCE WITH OSHA REQUIREMENTS.

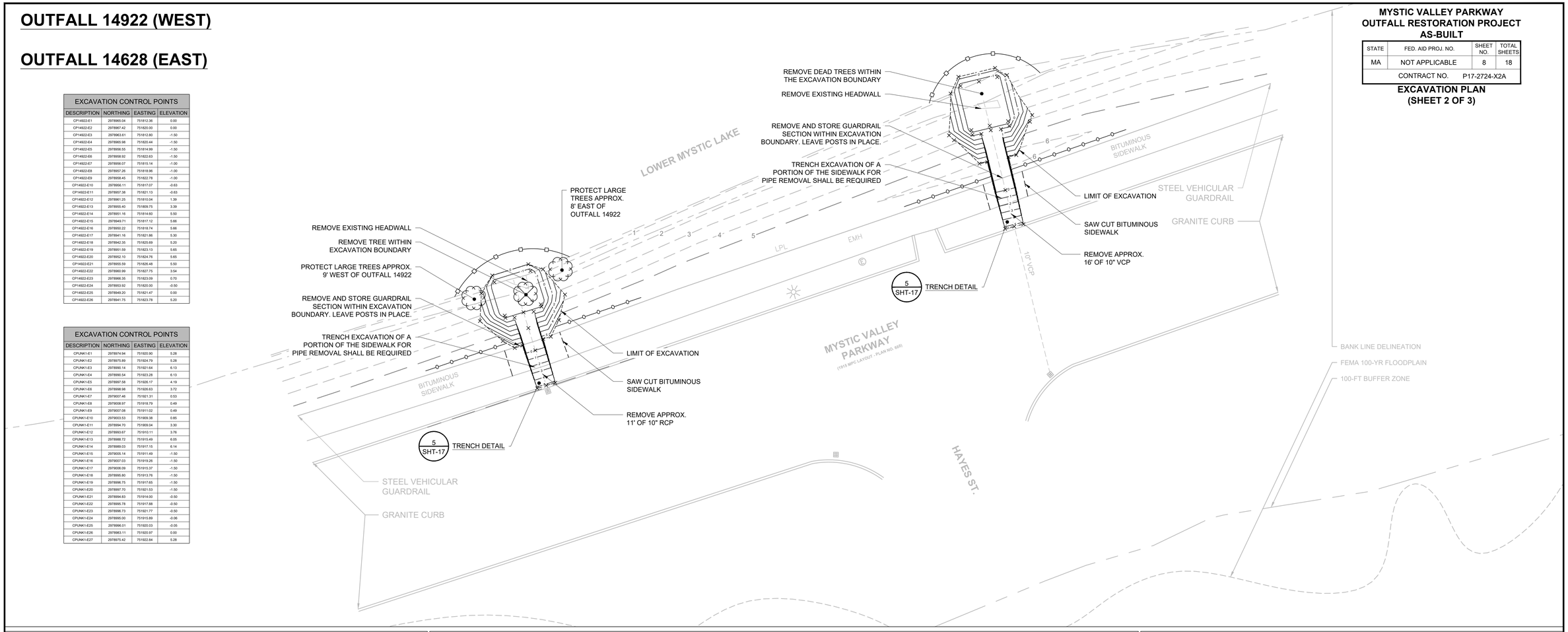
EXCAVATION PLAN.DWG Plotted on 24-May-2023 9:10 AM

OUTFALL 14922 (WEST)

OUTFALL 14628 (EAST)

EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14922-E1	2978965.04	751812.36	0.00
CP14922-E2	2978967.42	751820.00	0.00
CP14922-E3	2978963.61	751812.80	-1.50
CP14922-E4	2978965.98	751820.44	-1.50
CP14922-E5	2978956.55	751814.99	-1.50
CP14922-E6	2978958.92	751822.63	-1.50
CP14922-E7	2978956.07	751815.14	-1.00
CP14922-E8	2978957.26	751818.96	-1.00
CP14922-E9	2978958.45	751822.78	-1.00
CP14922-E10	2978956.11	751817.07	-0.63
CP14922-E11	2978957.38	751821.13	-0.63
CP14922-E12	2978961.25	751810.04	1.39
CP14922-E13	2978955.40	751809.75	3.39
CP14922-E14	2978951.16	751814.60	5.50
CP14922-E15	2978949.71	751817.12	5.66
CP14922-E16	2978950.22	751818.74	5.66
CP14922-E17	2978941.16	751821.86	5.30
CP14922-E18	2978942.35	751825.69	5.20
CP14922-E19	2978951.59	751823.13	5.65
CP14922-E20	2978952.10	751824.76	5.65
CP14922-E21	2978955.59	751826.48	5.50
CP14922-E22	2978960.99	751827.75	3.54
CP14922-E23	2978966.35	751823.09	0.70
CP14922-E24	2978953.92	751820.00	-0.50
CP14922-E25	2978949.20	751821.47	0.00
CP14922-E26	2978941.75	751823.78	5.20

EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CPUNK1-E1	2978974.94	751920.90	5.28
CPUNK1-E2	2978975.89	751924.79	5.28
CPUNK1-E3	2978990.14	751921.64	6.13
CPUNK1-E4	2978990.54	751923.28	6.13
CPUNK1-E5	2978997.58	751926.17	4.19
CPUNK1-E6	2978998.98	751926.63	3.72
CPUNK1-E7	2979007.46	751921.31	0.53
CPUNK1-E8	2979008.97	751918.79	0.49
CPUNK1-E9	2979007.08	751911.02	0.49
CPUNK1-E10	2979003.53	751909.38	0.85
CPUNK1-E11	2978994.70	751909.04	3.30
CPUNK1-E12	2978993.67	751910.11	3.76
CPUNK1-E13	2978988.72	751915.49	6.05
CPUNK1-E14	2978989.03	751917.15	6.14
CPUNK1-E15	2979005.14	751911.49	-1.50
CPUNK1-E16	2979007.03	751919.26	-1.50
CPUNK1-E17	2979006.09	751915.37	-1.50
CPUNK1-E18	2978995.80	751913.76	-1.50
CPUNK1-E19	2978996.75	751917.65	-1.50
CPUNK1-E20	2978997.70	751921.53	-1.50
CPUNK1-E21	2978994.83	751914.00	-0.50
CPUNK1-E22	2978995.78	751917.88	-0.50
CPUNK1-E23	2978996.73	751921.77	-0.50
CPUNK1-E24	2978995.00	751915.89	-0.06
CPUNK1-E25	2978996.01	751920.03	-0.05
CPUNK1-E26	2978863.11	751920.97	0.00
CPUNK1-E27	2978975.42	751922.84	5.28



MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

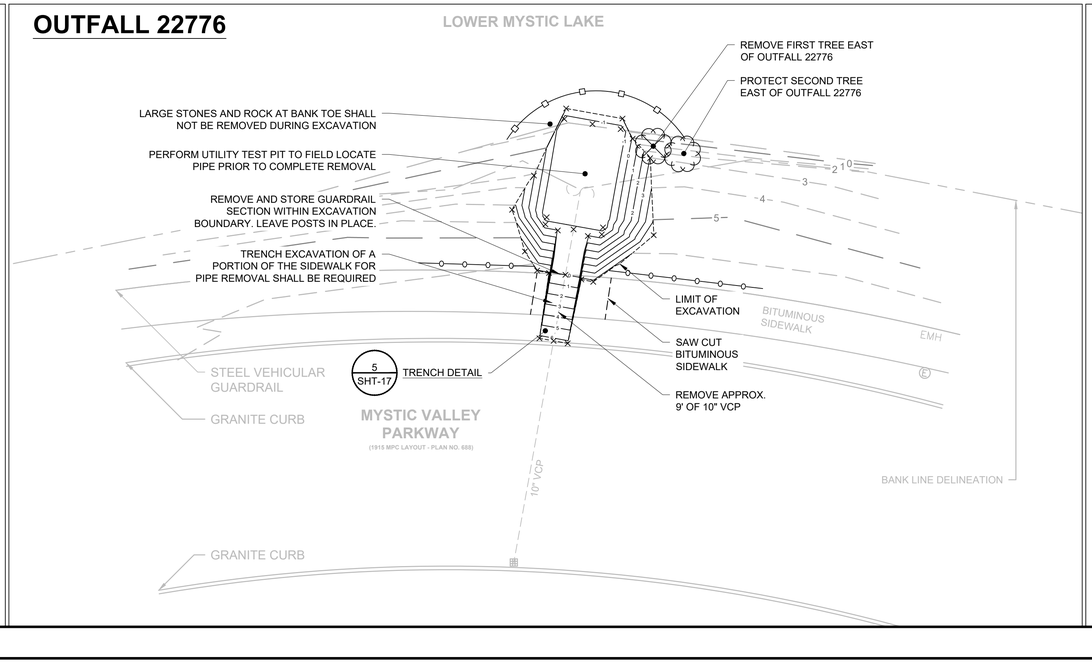
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	8	18
	CONTRACT NO. P17-2724-X2A		

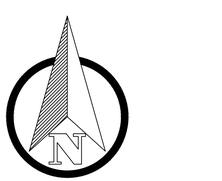
EXCAVATION PLAN
(SHEET 2 OF 3)

EXCAVATION PLAN.DWG Plotted on 18-Sep-2023 1:16 PM

EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP22776-E1	2979030.53	752144.78	6.36
CP22776-E2	2979029.82	752148.73	6.36
CP22776-E3	2979038.75	752150.63	6.19
CP22776-E4	2979038.42	752152.30	6.23
CP22776-E5	2979044.94	752160.75	5.48
CP22776-E6	2979055.70	752160.24	3.02
CP22776-E7	2979058.42	752157.81	0.12
CP22776-E8	2979061.24	752156.39	0.00
CP22776-E9	2979062.65	752148.52	0.00
CP22776-E10	2979053.28	752144.01	1.08
CP22776-E11	2979048.49	752140.96	3.26
CP22776-E12	2979042.66	752142.74	5.90
CP22776-E13	2979040.00	752144.45	6.06
CP22776-E14	2979039.66	752146.12	6.10
CP22776-E15	2979047.44	752145.79	-1.50
CP22776-E16	2979046.03	752153.66	-1.50
CP22776-E17	2979059.76	752156.13	-1.50
CP22776-E18	2979061.18	752148.25	-1.50
CP22776-E19	2979060.47	752152.19	-1.50
CP22776-E20	2979046.46	752145.61	-0.50
CP22776-E21	2979045.04	752153.49	-0.50
CP22776-E22	2979045.75	752149.55	-0.50
CP22776-E23	2979039.41	752148.41	0.00
CP22776-E24	2979045.60	752147.35	-0.37
CP22776-E25	2979044.83	752151.55	-0.37
CP22776-E26	2979030.17	752146.76	6.25

OUTFALL 22776





0 10 20 30 40

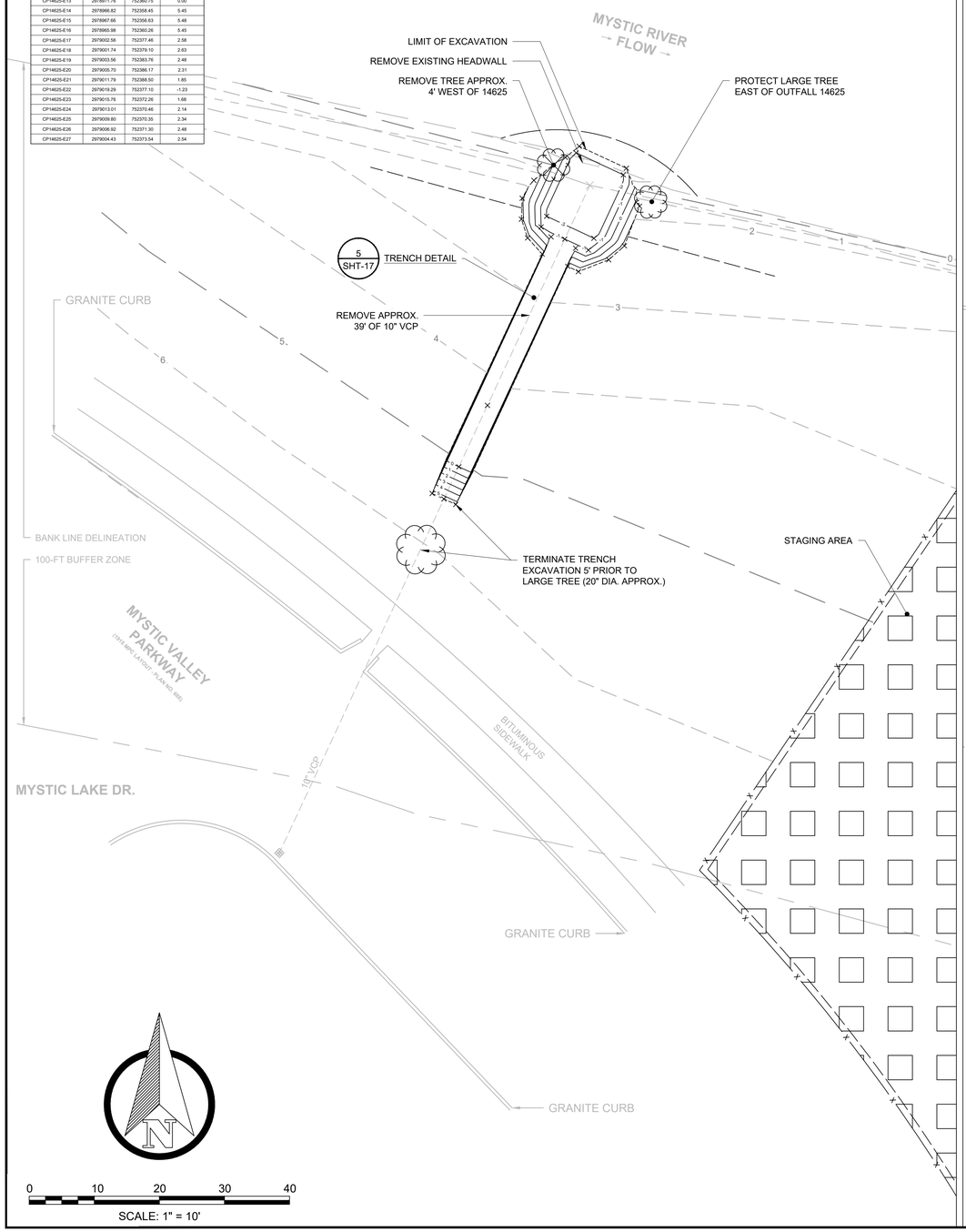
SCALE: 1" = 10'

NOTES:

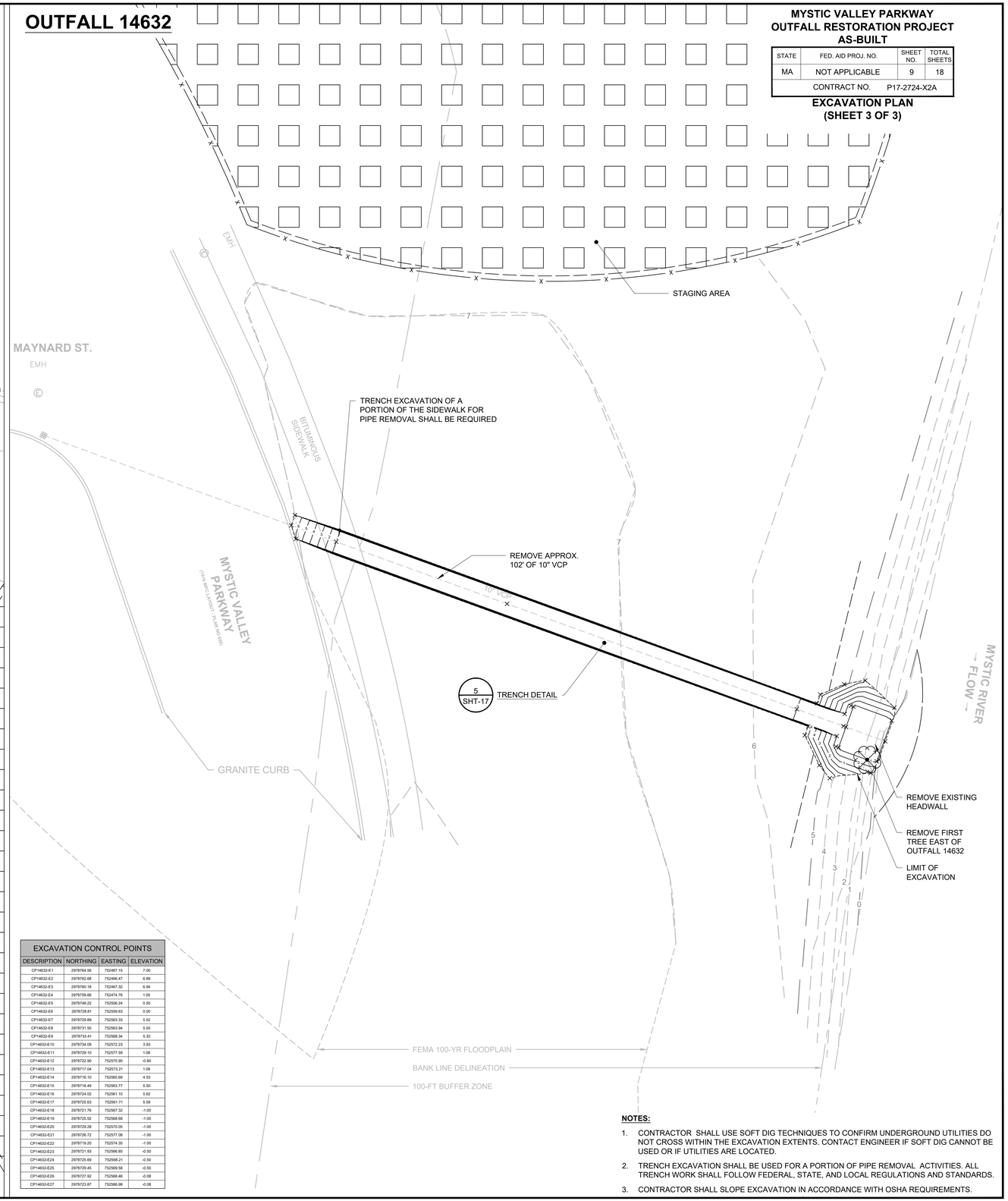
1. CONTRACTOR SHALL USE SOFT DIG TECHNIQUES TO CONFIRM UNDERGROUND UTILITIES DO NOT CROSS WITHIN THE EXCAVATION EXTENTS. CONTACT ENGINEER IF SOFT DIG CANNOT BE USED OR IF UTILITIES ARE LOCATED.
2. TRENCH EXCAVATION SHALL BE USED FOR A PORTION OF PIPE REMOVAL ACTIVITIES. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
3. CONTRACTOR SHALL SLOPE EXCAVATION IN ACCORDANCE WITH OSHA REQUIREMENTS.

OUTFALL 14625

EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14625-E1	2979021.00	752379.23	-1.44
CP14625-E2	2979017.62	752386.48	-1.44
CP14625-E3	2979019.98	752378.76	-2.00
CP14625-E4	2979016.61	752386.01	-2.00
CP14625-E5	2979010.24	752374.22	-2.00
CP14625-E6	2979006.86	752381.48	-2.00
CP14625-E7	2979008.61	752373.38	-1.00
CP14625-E8	2979006.74	752377.01	-1.00
CP14625-E9	2979005.05	752380.64	-1.00
CP14625-E10	2979007.07	752374.90	-0.97
CP14625-E11	2979005.34	752378.67	-0.97
CP14625-E12	2978981.20	752365.13	-0.50
CP14625-E13	2978971.76	752360.75	0.00
CP14625-E14	2978966.82	752358.45	5.45
CP14625-E15	2978967.66	752356.63	5.48
CP14625-E16	2978965.98	752360.26	5.45
CP14625-E17	2979002.56	752377.46	2.58
CP14625-E18	2979001.74	752379.10	2.63
CP14625-E19	2979003.56	752383.76	2.48
CP14625-E20	2979005.70	752386.17	2.31
CP14625-E21	2979011.79	752388.50	1.85
CP14625-E22	2979019.29	752377.10	-1.23
CP14625-E23	2979015.76	752372.26	1.68
CP14625-E24	2979013.01	752370.46	2.14
CP14625-E25	2979009.80	752370.35	2.34
CP14625-E26	2979006.92	752371.30	2.48
CP14625-E27	2979004.43	752373.54	2.54



OUTFALL 14632



EXCAVATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14632-E1	2978764.56	752467.15	7.00
CP14632-E2	2978762.66	752466.47	6.89
CP14632-E3	2978760.18	752467.32	6.94
CP14632-E4	2978759.66	752474.76	1.00
CP14632-E5	2978748.22	752506.24	0.50
CP14632-E6	2978728.81	752559.63	0.00
CP14632-E7	2978729.89	752563.33	5.52
CP14632-E8	2978731.50	752563.94	5.50
CP14632-E9	2978733.41	752568.34	5.32
CP14632-E10	2978734.09	752572.23	3.93
CP14632-E11	2978729.10	752577.59	1.08
CP14632-E12	2978722.90	752575.90	-0.80
CP14632-E13	2978717.04	752573.21	1.09
CP14632-E14	2978716.10	752565.69	4.53
CP14632-E15	2978718.49	752563.77	5.50
CP14632-E16	2978724.02	752561.10	5.62
CP14632-E17	2978725.63	752561.71	5.59
CP14632-E18	2978721.76	752567.32	-1.00
CP14632-E19	2978725.52	752568.68	-1.00
CP14632-E20	2978729.28	752570.05	-1.00
CP14632-E21	2978726.72	752577.08	-1.00
CP14632-E22	2978719.20	752574.35	-1.00
CP14632-E23	2978721.93	752566.85	-0.50
CP14632-E24	2978725.99	752568.21	-0.50
CP14632-E25	2978729.45	752569.58	-0.50
CP14632-E26	2978727.92	752568.46	-0.08
CP14632-E27	2978723.87	752566.96	-0.08

NOTES:

1. CONTRACTOR SHALL USE SOFT DIG TECHNIQUES TO CONFIRM UNDERGROUND UTILITIES DO NOT CROSS WITHIN THE EXCAVATION EXTENTS. CONTACT ENGINEER IF SOFT DIG CANNOT BE USED OR IF UTILITIES ARE LOCATED.
2. TRENCH EXCAVATION SHALL BE USED FOR A PORTION OF PIPE REMOVAL ACTIVITIES. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
3. CONTRACTOR SHALL SLOPE EXCAVATION IN ACCORDANCE WITH OSHA REQUIREMENTS.

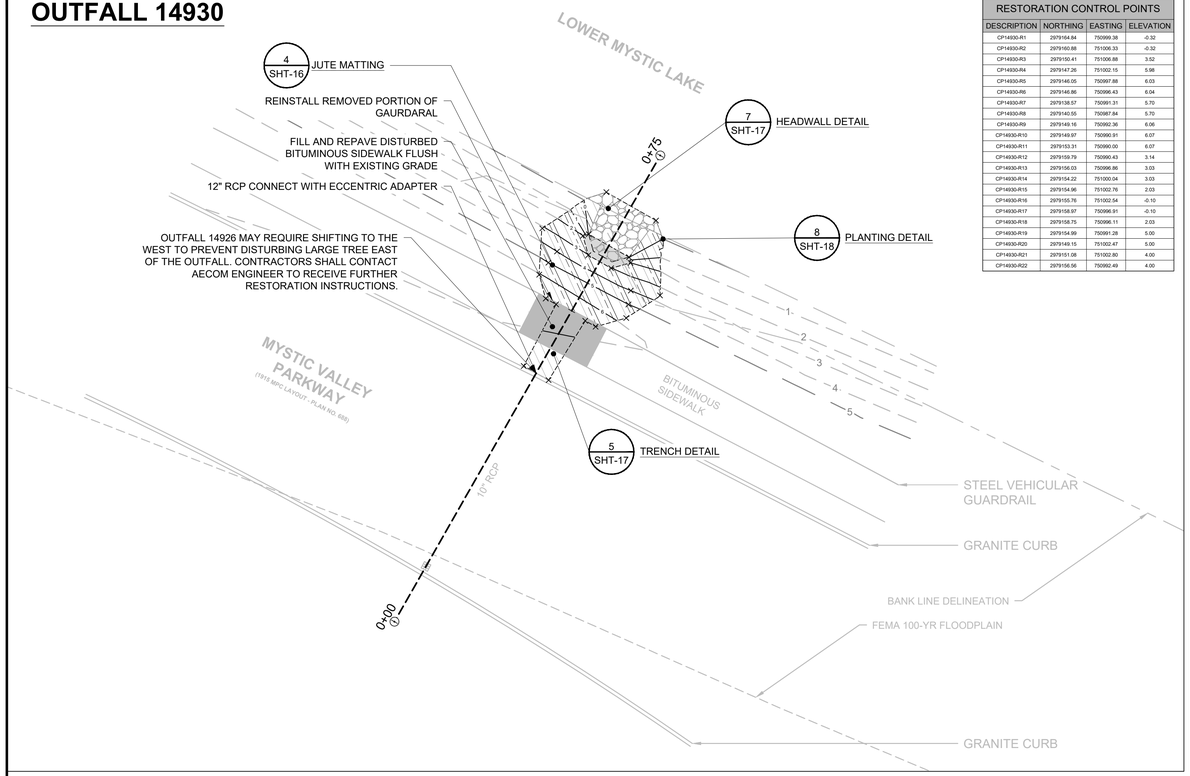
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	9	18
CONTRACT NO.	P17-2724-X2A		

EXCAVATION PLAN
(SHEET 3 OF 3)

EXCAVATION PLAN.DWG Plotted on 24-May-2023 9:10 AM

OUTFALL 14930



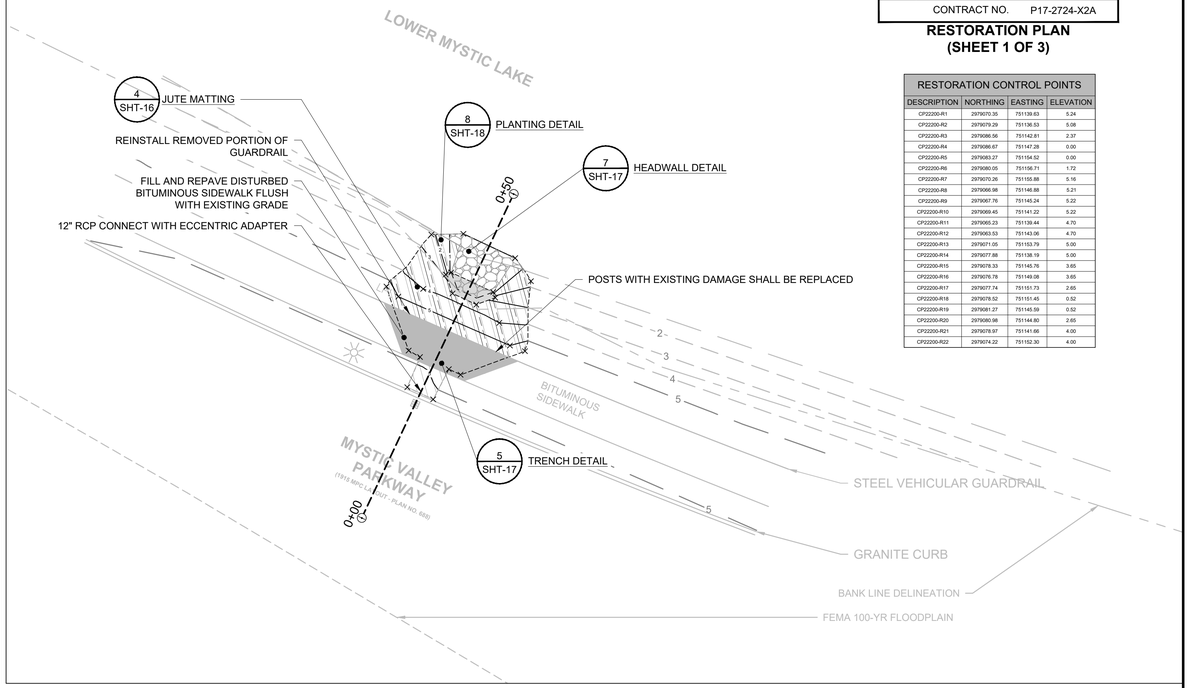
RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14930-R1	2979164.84	750999.38	-0.32
CP14930-R2	2979160.88	751006.33	-0.32
CP14930-R3	2979150.41	751006.88	3.52
CP14930-R4	2979147.26	751002.15	5.98
CP14930-R5	2979146.05	750997.88	6.03
CP14930-R6	2979146.86	750996.43	6.04
CP14930-R7	2979138.57	750991.31	5.70
CP14930-R8	2979140.55	750987.84	5.70
CP14930-R9	2979149.16	750992.36	6.06
CP14930-R10	2979149.97	750990.91	6.07
CP14930-R11	2979153.31	750990.00	6.07
CP14930-R12	2979159.79	750990.43	3.14
CP14930-R13	2979156.03	750996.86	3.03
CP14930-R14	2979154.22	751000.04	3.03
CP14930-R15	2979154.96	751002.76	2.03
CP14930-R16	2979155.76	751002.54	-0.10
CP14930-R17	2979158.97	750996.91	-0.10
CP14930-R18	2979158.75	750996.11	2.03
CP14930-R19	2979154.99	750991.28	5.00
CP14930-R20	2979149.15	751002.47	5.00
CP14930-R21	2979151.08	751002.80	4.00
CP14930-R22	2979156.56	750992.49	4.00

OUTFALL 22200

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

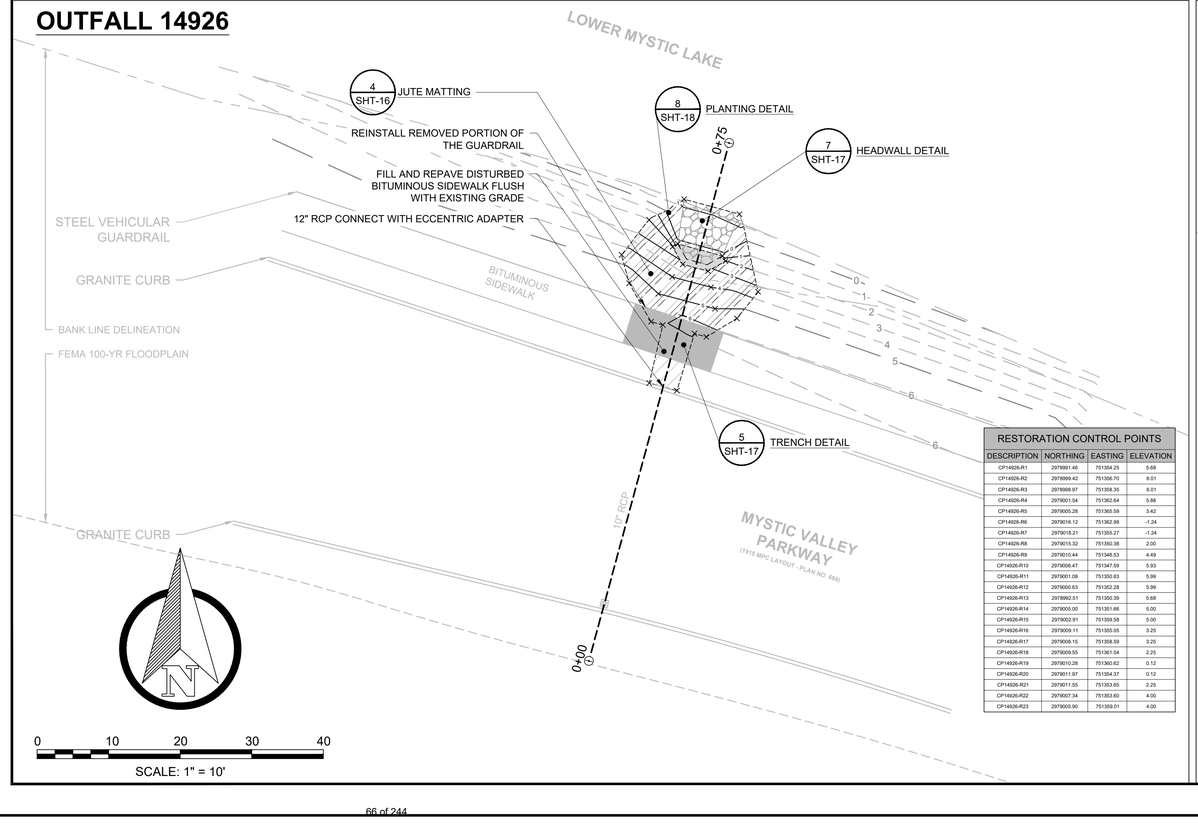
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	10	18
	CONTRACT NO. P17-2724-X2A		

RESTORATION PLAN
(SHEET 1 OF 3)



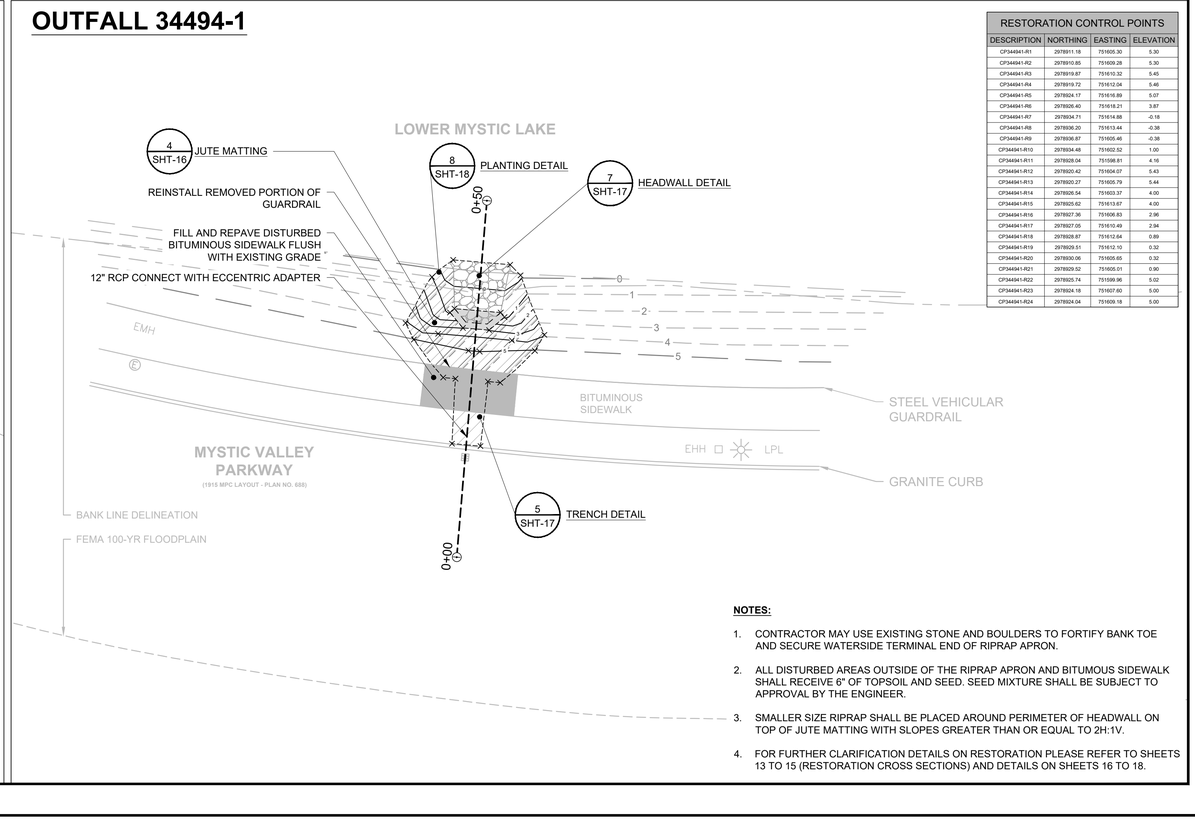
RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP22200-R1	2979570.35	751139.63	5.24
CP22200-R2	2979579.29	751136.53	5.08
CP22200-R3	2979586.56	751142.81	2.37
CP22200-R4	2979586.67	751147.28	0.00
CP22200-R5	2979583.27	751154.52	0.00
CP22200-R6	2979580.05	751156.71	1.72
CP22200-R7	2979570.26	751155.88	5.16
CP22200-R8	2979566.98	751146.88	5.21
CP22200-R9	2979567.76	751145.24	5.22
CP22200-R10	2979569.45	751141.22	5.22
CP22200-R11	2979565.23	751139.44	4.70
CP22200-R12	2979563.53	751143.06	4.70
CP22200-R13	2979571.05	751153.79	5.00
CP22200-R14	2979577.88	751138.19	5.00
CP22200-R15	2979578.33	751145.76	3.65
CP22200-R16	2979576.78	751149.08	3.65
CP22200-R17	2979577.74	751151.73	2.65
CP22200-R18	2979578.52	751151.45	0.52
CP22200-R19	2979581.27	751145.59	0.52
CP22200-R20	2979580.98	751144.80	2.65
CP22200-R21	2979578.97	751141.66	4.00
CP22200-R22	2979574.22	751152.30	4.00

OUTFALL 14926



RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14926-R1	2978991.46	751354.25	5.68
CP14926-R2	2978999.42	751356.70	6.01
CP14926-R3	2978998.97	751358.35	6.01
CP14926-R4	2979001.54	751362.64	5.88
CP14926-R5	2979005.28	751365.59	3.42
CP14926-R6	2979016.12	751362.99	-1.24
CP14926-R7	2979018.21	751355.27	-1.24
CP14926-R8	2979015.32	751350.38	2.00
CP14926-R9	2979010.44	751346.53	4.49
CP14926-R10	2979006.47	751347.59	5.93
CP14926-R11	2979001.08	751350.83	5.99
CP14926-R12	2979000.63	751352.28	5.99
CP14926-R13	2978992.51	751350.39	5.68
CP14926-R14	2979005.00	751351.66	5.00
CP14926-R15	2979002.91	751359.58	5.00
CP14926-R16	2979009.11	751355.05	3.25
CP14926-R17	2979008.15	751358.59	3.25
CP14926-R18	2979009.55	751361.04	2.25
CP14926-R19	2979010.28	751360.62	0.12
CP14926-R20	2979011.97	751354.37	0.12
CP14926-R21	2979011.55	751353.65	2.25
CP14926-R22	2979007.34	751353.60	4.00
CP14926-R23	2979005.90	751359.01	4.00

OUTFALL 34494-1



RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP34494141-R1	2978911.18	751605.30	5.30
CP34494141-R2	2978910.85	751609.28	5.30
CP34494141-R3	2978919.87	751610.32	5.45
CP34494141-R4	2978919.72	751612.04	5.46
CP34494141-R5	2978924.17	751616.89	5.07
CP34494141-R6	2978926.40	751618.31	3.87
CP34494141-R7	2978934.71	751614.88	-0.18
CP34494141-R8	2978936.20	751613.44	-0.38
CP34494141-R9	2978936.87	751605.46	-0.38
CP34494141-R10	2978934.48	751602.52	1.00
CP34494141-R11	2978928.04	751598.81	4.16
CP34494141-R12	2978920.42	751604.07	5.43
CP34494141-R13	2978920.27	751605.79	5.44
CP34494141-R14	2978926.54	751603.37	4.00
CP34494141-R15	2978925.62	751613.67	4.00
CP34494141-R16	2978927.36	751606.83	2.96
CP34494141-R17	2978927.05	751610.49	2.94
CP34494141-R18	2978928.87	751612.64	0.89
CP34494141-R19	2978929.51	751612.10	0.32
CP34494141-R20	2978930.06	751605.65	0.32
CP34494141-R21	2978929.52	751605.01	0.90
CP34494141-R22	2978925.74	751599.96	5.02
CP34494141-R23	2978924.18	751607.60	5.00
CP34494141-R24	2978924.04	751609.18	5.00

NOTES:

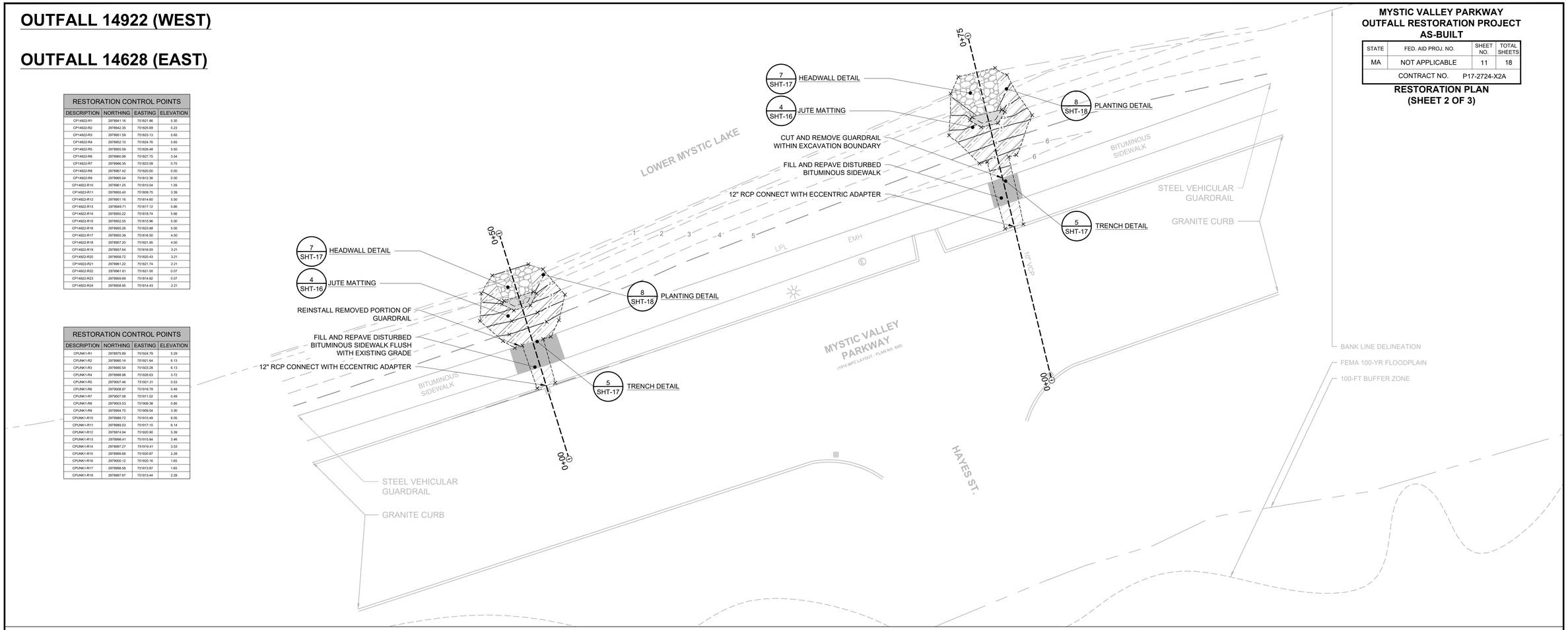
1. CONTRACTOR MAY USE EXISTING STONE AND BOULDERS TO FORTIFY BANK TOE AND SECURE WATERSIDE TERMINAL END OF RIPRAP APRON.
2. ALL DISTURBED AREAS OUTSIDE OF THE RIPRAP APRON AND BITUMOUS SIDEWALK SHALL RECEIVE 6" OF TOPSOIL AND SEED. SEED MIXTURE SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
3. SMALLER SIZE RIPRAP SHALL BE PLACED AROUND PERIMETER OF HEADWALL ON TOP OF JUTE MATTING WITH SLOPES GREATER THAN OR EQUAL TO 2H:1V.
4. FOR FURTHER CLARIFICATION DETAILS ON RESTORATION PLEASE REFER TO SHEETS 13 TO 15 (RESTORATION CROSS SECTIONS) AND DETAILS ON SHEETS 16 TO 18.

OUTFALL 14922 (WEST)

OUTFALL 14628 (EAST)

RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14922-R1	2978941.16	751821.86	5.30
CP14922-R2	2978942.35	751825.69	5.23
CP14922-R3	2978951.59	751823.13	5.65
CP14922-R4	2978952.10	751824.76	5.65
CP14922-R5	2978955.59	751826.48	5.50
CP14922-R6	2978960.99	751827.75	3.54
CP14922-R7	2978966.35	751823.09	0.70
CP14922-R8	2978967.42	751820.00	0.00
CP14922-R9	2978965.04	751812.36	0.00
CP14922-R10	2978961.25	751810.04	1.39
CP14922-R11	2978955.40	751809.75	3.39
CP14922-R12	2978951.16	751814.60	5.50
CP14922-R13	2978949.71	751817.12	5.66
CP14922-R14	2978950.22	751818.74	5.66
CP14922-R15	2978952.55	751815.96	5.00
CP14922-R16	2978955.26	751823.88	5.00
CP14922-R17	2978955.39	751816.50	4.00
CP14922-R18	2978957.20	751821.95	4.00
CP14922-R19	2978957.64	751816.93	3.21
CP14922-R20	2978958.72	751820.43	3.21
CP14922-R21	2978961.22	751821.74	2.21
CP14922-R22	2978961.61	751821.00	0.07
CP14922-R23	2978959.69	751814.82	0.07
CP14922-R24	2978958.95	751814.43	2.21

RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CPUNK1-R1	2978975.89	751924.79	5.29
CPUNK1-R2	2978960.14	751921.64	6.13
CPUNK1-R3	2978960.54	751923.28	6.13
CPUNK1-R4	2978958.98	751926.63	3.72
CPUNK1-R5	2979007.46	751921.31	0.53
CPUNK1-R6	2979008.87	751918.79	0.49
CPUNK1-R7	2979007.08	751911.02	0.49
CPUNK1-R8	2979003.53	751909.38	0.85
CPUNK1-R9	2978994.70	751909.04	3.30
CPUNK1-R10	2978988.72	751915.49	6.05
CPUNK1-R11	2978989.03	751917.15	6.14
CPUNK1-R12	2978974.94	751920.90	5.39
CPUNK1-R13	2978996.41	751915.84	3.46
CPUNK1-R14	2978997.27	751919.41	3.53
CPUNK1-R15	2978999.68	751920.87	2.28
CPUNK1-R16	2979000.12	751920.16	1.65
CPUNK1-R17	2978998.58	751913.87	1.65
CPUNK1-R18	2978997.87	751913.44	2.28



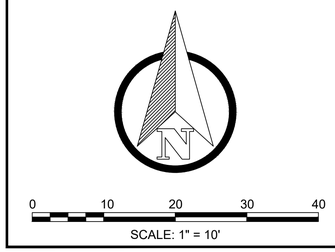
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	11	18
	CONTRACT NO. P17-2724-X2A		

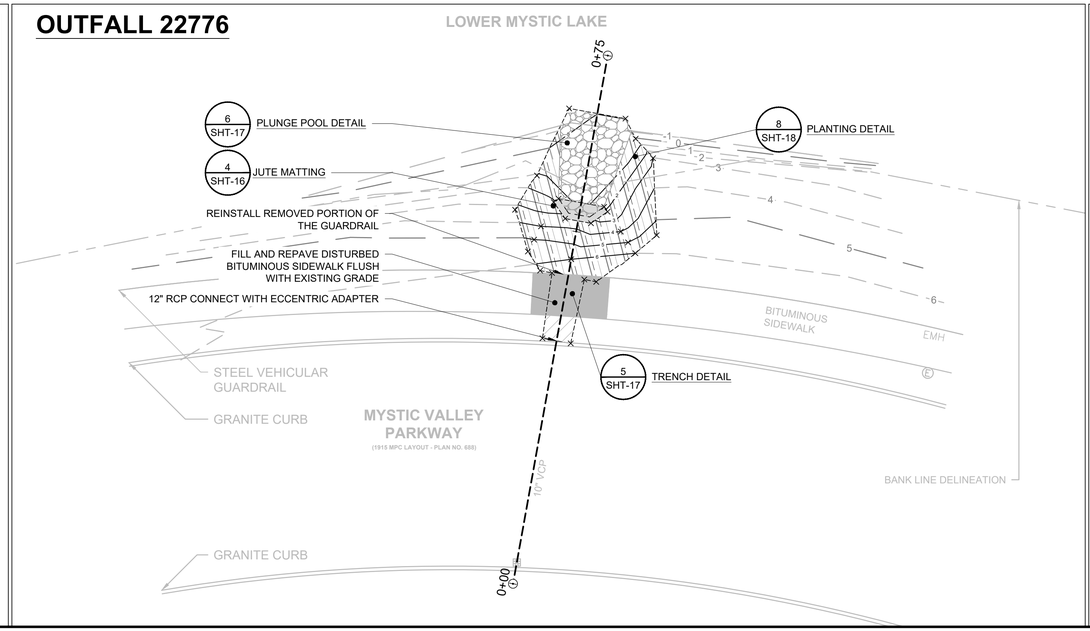
RESTORATION PLAN
(SHEET 2 OF 3)

RESTORATION PLAN.DWG Plotted on 18-Sep-2023 1:27 PM

RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP22776-R1	2979029.82	752148.73	6.36
CP22776-R2	2979038.75	752150.63	6.19
CP22776-R3	2979038.42	752152.30	6.23
CP22776-R4	2979044.94	752160.75	5.48
CP22776-R5	2979055.70	752160.24	3.02
CP22776-R6	2979058.42	752157.81	0.12
CP22776-R7	2979061.24	752156.39	0.00
CP22776-R8	2979062.65	752148.52	0.00
CP22776-R9	2979053.28	752144.01	1.08
CP22776-R10	2979048.49	752140.96	3.26
CP22776-R11	2979042.66	752142.74	5.90
CP22776-R12	2979040.00	752144.45	6.06
CP22776-R13	2979039.66	752146.12	6.10
CP22776-R14	2979030.53	752144.78	6.36
CP22776-R15	2979044.32	752143.61	5.00
CP22776-R16	2979043.93	752156.75	5.00
CP22776-R17	2979046.18	752144.58	4.00
CP22776-R18	2979045.45	752155.74	4.00
CP22776-R19	2979047.26	752147.96	3.34
CP22776-R20	2979046.61	752151.57	3.29
CP22776-R21	2979048.22	752153.88	2.17
CP22776-R22	2979048.90	752153.41	1.79
CP22776-R23	2979050.05	752147.03	1.66
CP22776-R24	2979049.57	752146.35	2.17
CP22776-R25	2979041.58	752148.80	6.00
CP22776-R26	2979042.42	752157.76	6.00



OUTFALL 22776

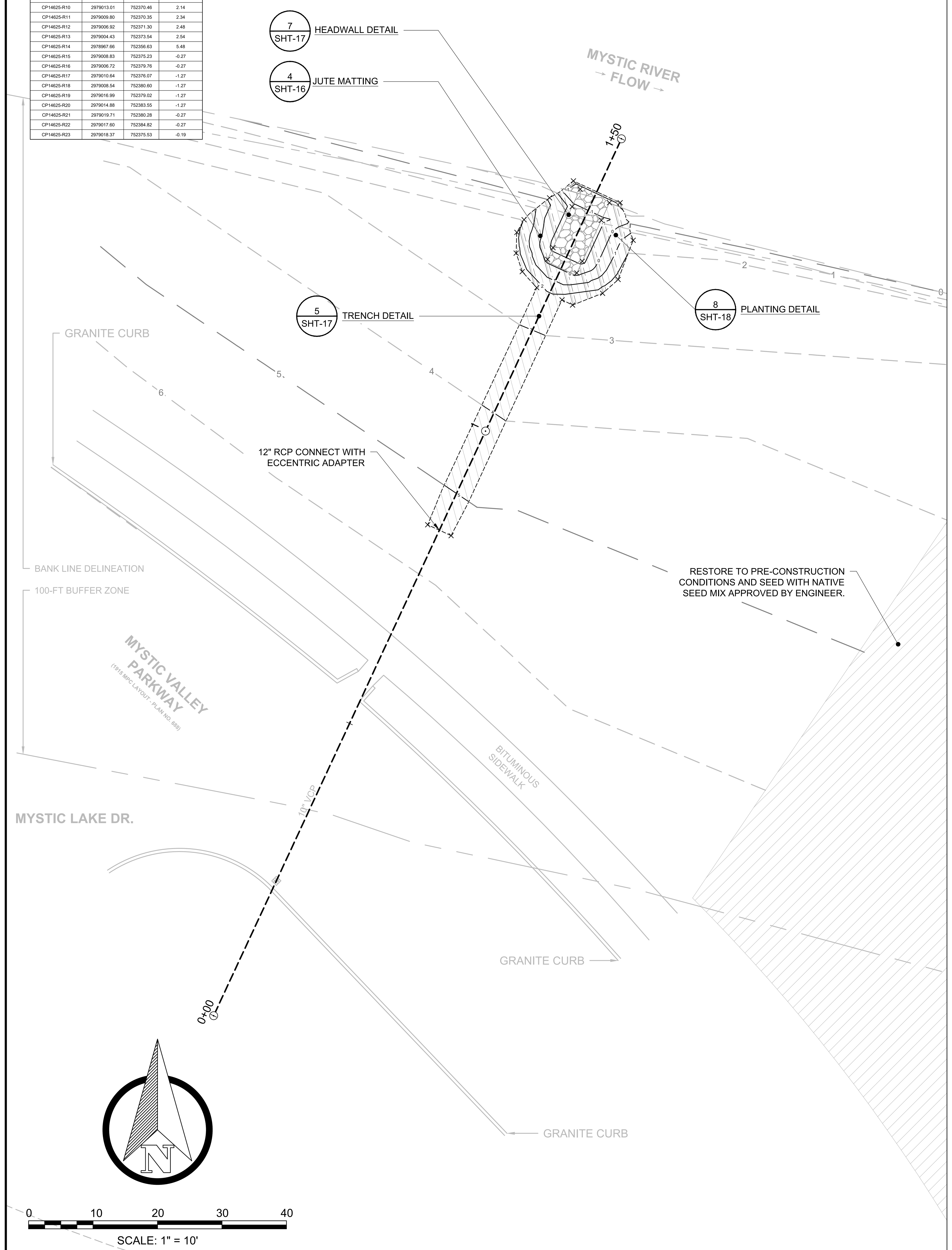


NOTES:

1. CONTRACTOR MAY USE EXISTING STONE AND BOULDERS TO FORTIFY BANK TOE AND SECURE WATERSIDE TERMINAL END OF RIPRAP APRON.
2. ALL DISTURBED AREAS OUTSIDE OF THE RIPRAP APRON AND BITUMOUS SIDEWALK SHALL RECEIVE 6" OF TOPSOIL AND SEED. SEED MIXTURE SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
3. SMALLER SIZE RIPRAP SHALL BE PLACED AROUND PERIMETER OF HEADWALL ON TOP OF JUTE MATTING WITH SLOPES GREATER THAN OR EQUAL TO 2H:1V.
4. FOR FURTHER CLARIFICATION DETAILS ON RESTORATION PLEASE REFER TO SHEETS 13 TO 15 (RESTORATION CROSS SECTIONS) AND DETAILS ON SHEETS 16 TO 18.

OUTFALL 14625

RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14625-R1	2978965.98	752360.26	5.45
CP14625-R2	2979002.56	752377.46	2.58
CP14625-R3	2979001.74	752379.10	2.63
CP14625-R4	2979003.56	752383.76	2.48
CP14625-R5	2979005.70	752386.17	2.31
CP14625-R6	2979011.79	752388.50	1.85
CP14625-R7	2979017.62	752386.48	-1.44
CP14625-R8	2979021.00	752379.23	-1.44
CP14625-R9	2979014.98	752371.57	1.97
CP14625-R10	2979013.01	752370.46	2.14
CP14625-R11	2979009.80	752370.35	2.34
CP14625-R12	2979006.92	752371.30	2.48
CP14625-R13	2979004.43	752373.54	2.54
CP14625-R14	2978967.66	752356.63	5.48
CP14625-R15	2979008.83	752375.23	-0.27
CP14625-R16	2979006.72	752379.76	-0.27
CP14625-R17	2979010.64	752376.07	-1.27
CP14625-R18	2979008.54	752380.60	-1.27
CP14625-R19	2979016.99	752379.02	-1.27
CP14625-R20	2979014.88	752383.55	-1.27
CP14625-R21	2979019.71	752380.28	-0.27
CP14625-R22	2979017.60	752384.82	-0.27
CP14625-R23	2979018.37	752375.53	-0.19

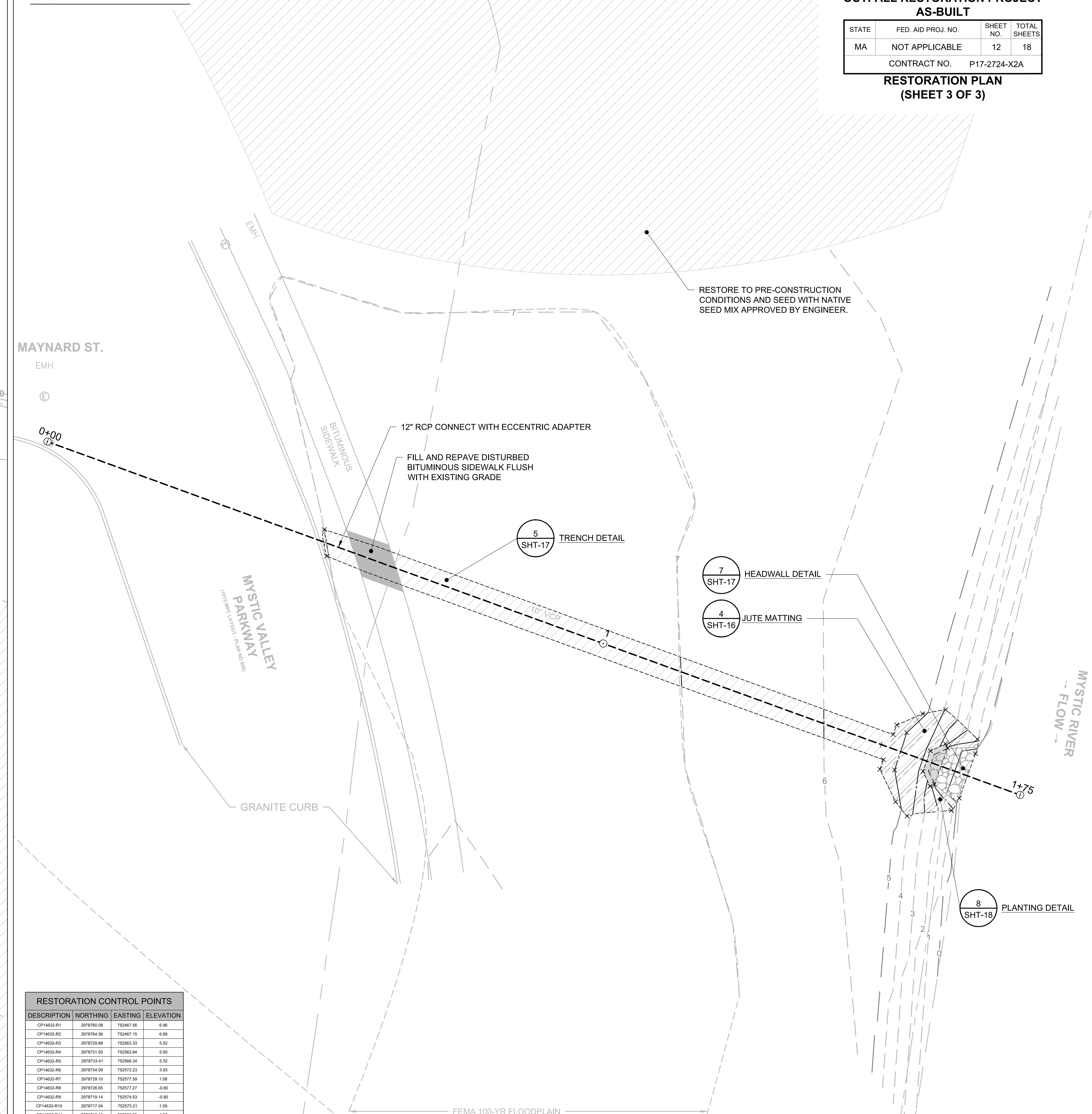


OUTFALL 14632

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	12	18
	CONTRACT NO. P17-2724-X2A		

RESTORATION PLAN
(SHEET 3 OF 3)



RESTORATION CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEVATION
CP14632-R1	2978760.08	752467.56	6.96
CP14632-R2	2978764.56	752467.15	6.89
CP14632-R3	2978729.89	752563.33	5.52
CP14632-R4	2978731.50	752563.94	5.50
CP14632-R5	2978733.41	752568.34	5.32
CP14632-R6	2978734.09	752572.23	3.93
CP14632-R7	2978729.10	752577.59	1.08
CP14632-R8	2978726.65	752577.27	-0.80
CP14632-R9	2978719.14	752574.53	-0.80
CP14632-R10	2978717.04	752573.21	1.09
CP14632-R11	2978716.10	752565.69	4.53
CP14632-R12	2978718.52	752563.75	5.51
CP14632-R13	2978724.02	752561.10	5.62
CP14632-R14	2978725.63	752561.71	5.59
CP14632-R15	2978723.90	752563.59	5.00
CP14632-R16	2978730.20	752565.63	5.00
CP14632-R17	2978727.12	752569.63	3.82
CP14632-R18	2978723.68	752568.38	3.82
CP14632-R19	2978721.12	752569.57	2.53
CP14632-R20	2978721.48	752570.32	0.87
CP14632-R21	2978727.56	752572.54	0.87
CP14632-R22	2978728.32	752572.18	2.53

NOTES:

1. CONTRACTOR MAY USE EXISTING STONE AND BOULDERS TO FORTIFY BANK TOE AND SECURE WATERSIDE TERMINAL END OF RIPRAP APRON.
2. ALL DISTURBED AREAS OUTSIDE OF THE RIPRAP APRON AND BITUMOUS SIDEWALK SHALL RECEIVE 6" OF TOPSOIL AND SEED. SEED MIXTURE SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
3. SMALLER SIZE RIPRAP SHALL BE PLACED AROUND PERIMETER OF HEADWALL ON TOP OF JUTE MATTING WITH SLOPES GREATER THAN OR EQUAL TO 2H:1V.
4. FOR FURTHER CLARIFICATION DETAILS ON RESTORATION PLEASE REFER TO SHEETS 13 TO 15 (RESTORATION CROSS SECTIONS) AND DETAILS ON SHEETS 16 TO 18.

Plotted on 24-May-2023 9:12 AM

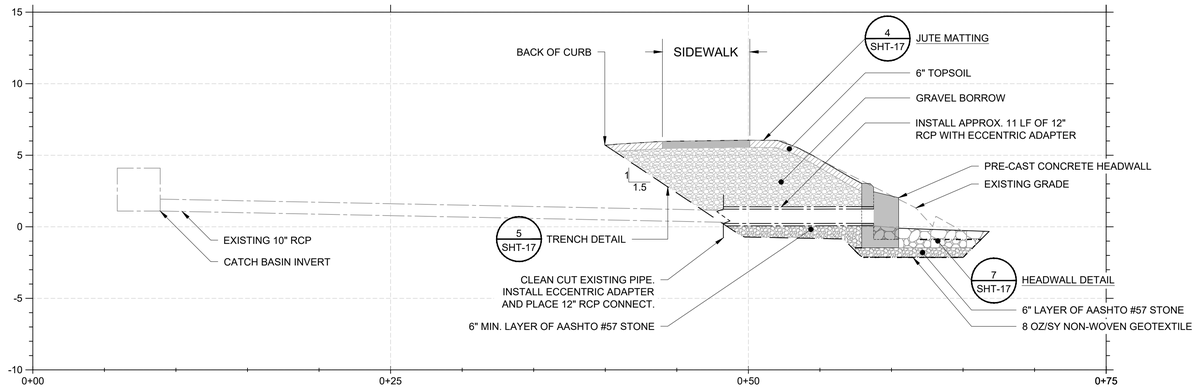
RESTORATION PLAN.DWG

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

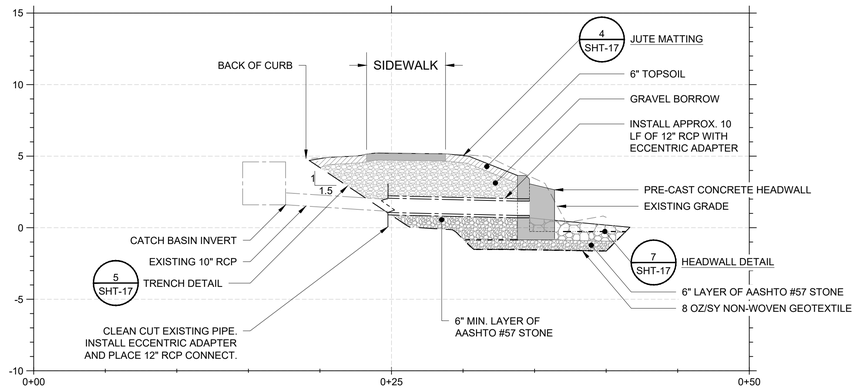
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	13	18
	CONTRACT NO. P17-2724-X2A		

RESTORATION CROSS SECTIONS
(SHEET 1 OF 3)

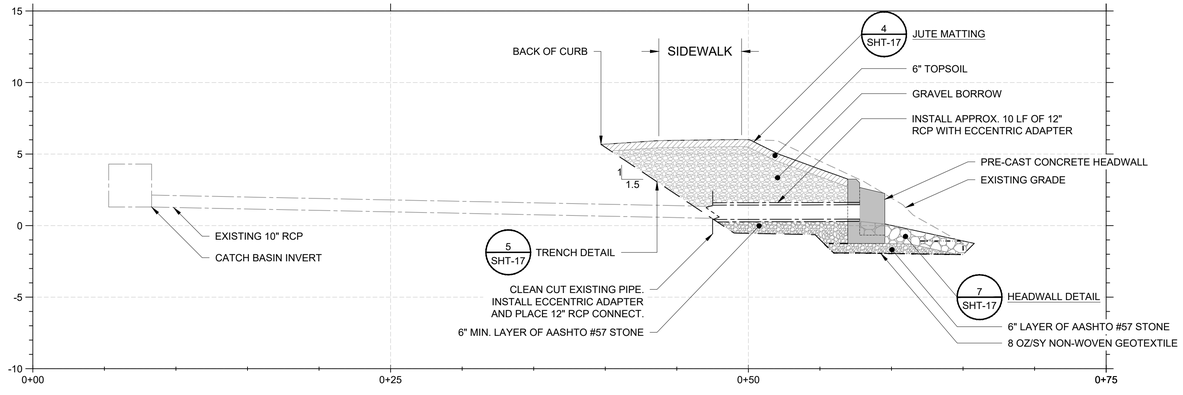
OF 14930



OF 22200



OF 14926



HOR. SCALE IN FEET
5 0 5 10
5 0 5 10
VER. SCALE IN FEET

NOTES:

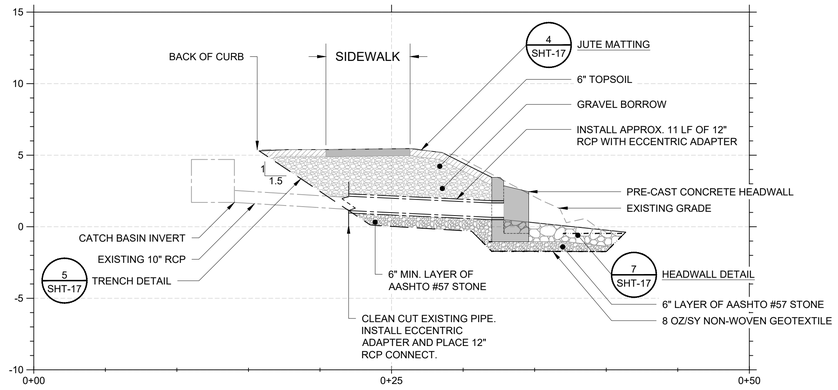
1. TRENCH EXCAVATION SHALL BE USED FOR PIPE REMOVAL. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
2. CONTRACTOR SHALL FOLLOW THE EXCAVATION GRADES PROVIDED IN SHEETS 7 TO 9, EXCAVATION PLAN.
3. FINAL GRADE SLOPES UPLAND OF THE HEADWALL SHALL BE APPROXIMATELY EQUAL TO EXISTING GRADE. CONTRACTOR SHALL FOLLOW THE FINAL GRADE SLOPES PROVIDED IN SHEETS 10 TO 12, RESTORATION PLAN.
4. CONTRACTOR SHALL DISCUSS EXCAVATION STRATEGIES AND DESIGN GRADES WITH ENGINEER PRIOR TO BEGINNING EXCAVATION ACTIVITIES AND RESTORATION ACTIVITIES.

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

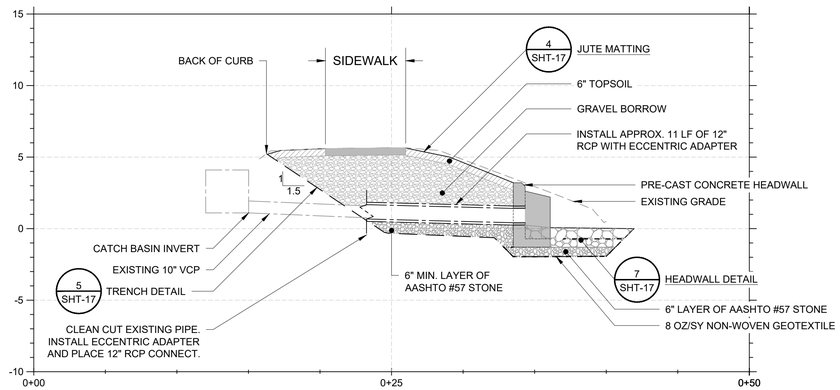
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	14	18
	CONTRACT NO. P17-2724-X2A		

RESTORATION CROSS SECTIONS (SHEET 2 OF 3)

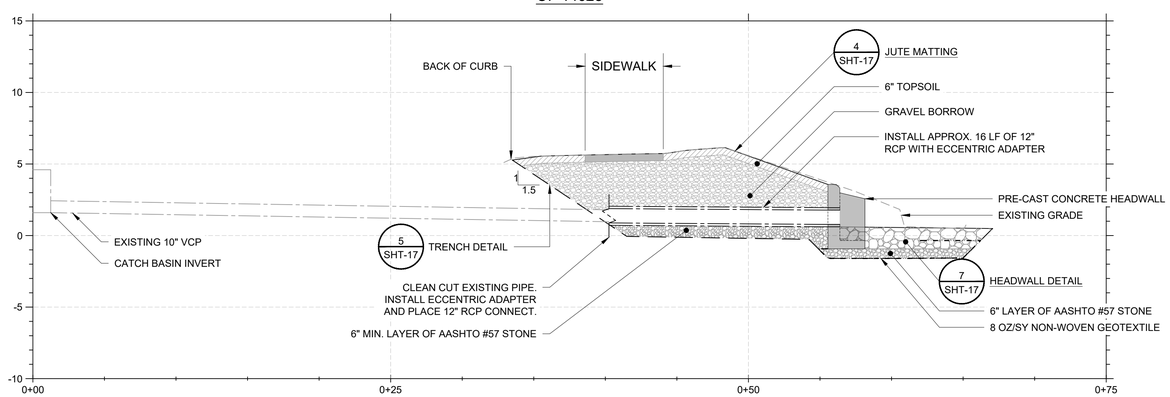
OF 34494-1



OF 14922



OF 14628



HOR. SCALE IN FEET
5 0 5 10
5 0 5 10
VER. SCALE IN FEET

NOTES:

1. TRENCH EXCAVATION SHALL BE USED FOR PIPE REMOVAL. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
2. CONTRACTOR SHALL FOLLOW THE EXCAVATION GRADES PROVIDED IN SHEETS 7 TO 9, EXCAVATION PLAN.
3. FINAL GRADE SLOPES UPLAND OF THE HEADWALL SHALL BE APPROXIMATELY EQUAL TO EXISTING GRADE. CONTRACTOR SHALL FOLLOW THE FINAL GRADE SLOPES PROVIDED IN SHEETS 10 TO 12, RESTORATION PLAN.
4. CONTRACTOR SHALL DISCUSS EXCAVATION STRATEGIES AND DESIGN GRADES WITH ENGINEER PRIOR TO BEGINNING EXCAVATION ACTIVITIES AND RESTORATION ACTIVITIES.

NOTES:

1. TRENCH EXCAVATION SHALL BE USED FOR PIPE REMOVAL. ALL TRENCH WORK SHALL FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS AND STANDARDS.
2. CONTRACTOR SHALL FOLLOW THE EXCAVATION GRADES PROVIDED IN SHEETS 7 TO 9, EXCAVATION PLAN.
3. FINAL GRADE SLOPES UPLAND OF THE HEADWALL SHALL BE APPROXIMATELY EQUAL TO EXISTING GRADE. CONTRACTOR SHALL FOLLOW THE FINAL GRADE SLOPES PROVIDED IN SHEETS 10 TO 12, RESTORATION PLAN.
4. CONTRACTOR SHALL DISCUSS EXCAVATION STRATEGIES AND DESIGN GRADES WITH ENGINEER PRIOR TO BEGINNING EXCAVATION ACTIVITIES AND RESTORATION ACTIVITIES.

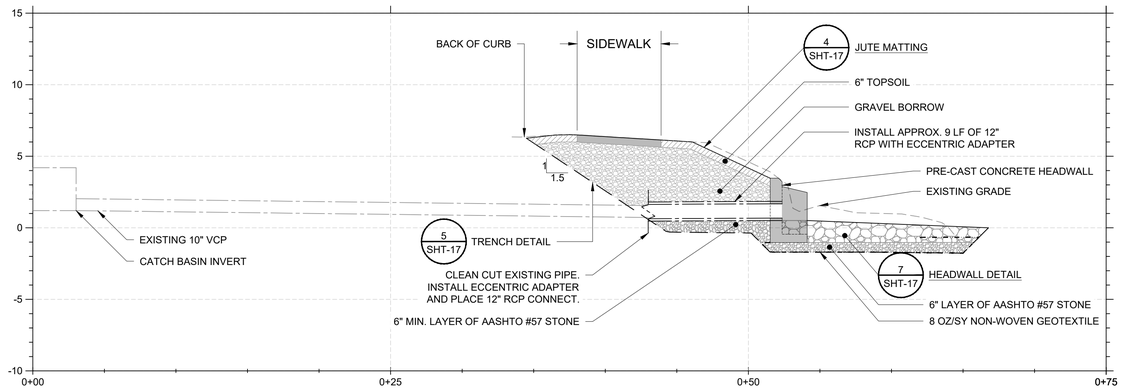
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	15	18
	CONTRACT NO. P17-2724-X2A		

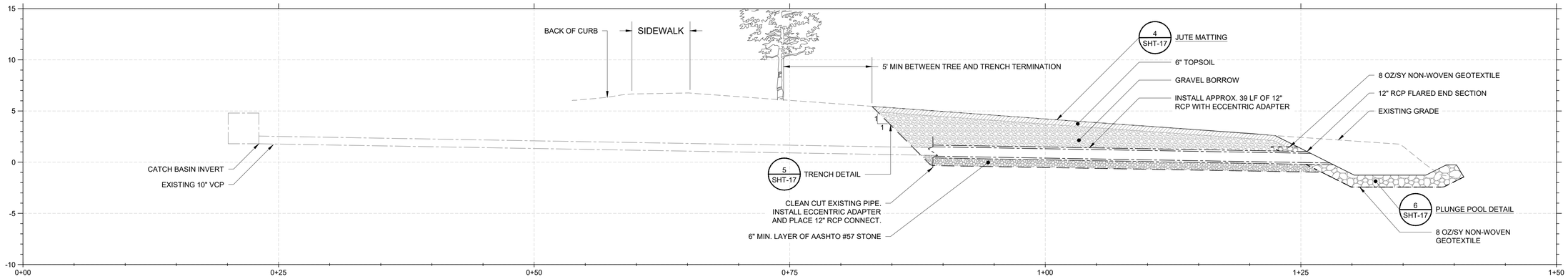
RESTORATION CROSS SECTIONS (SHEET 3 OF 3)

CROSS SECTIONS.DWG Plotted on 24-May-2023 9:14 AM

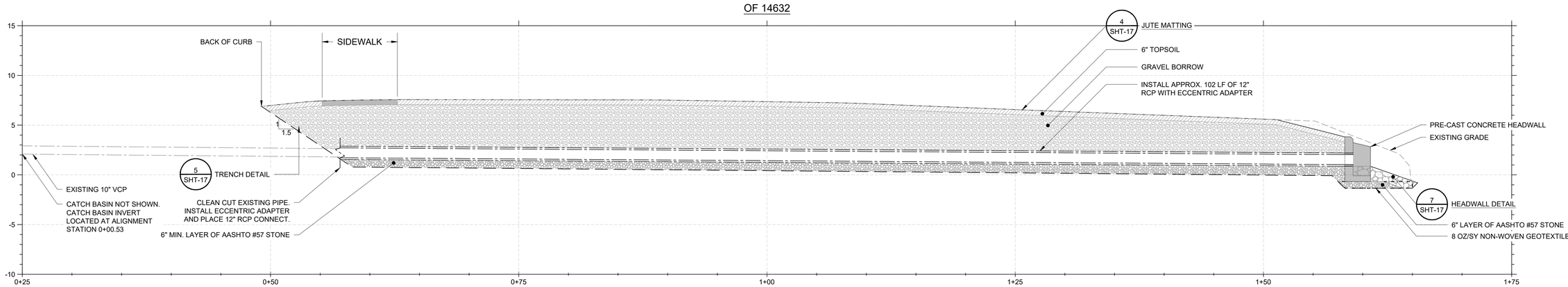
OF 22776



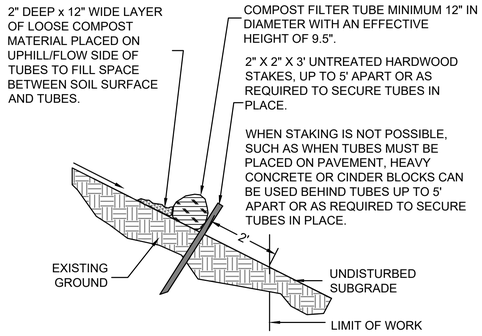
OF 14625

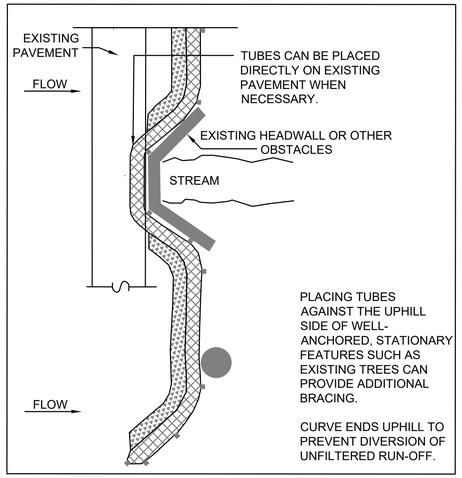


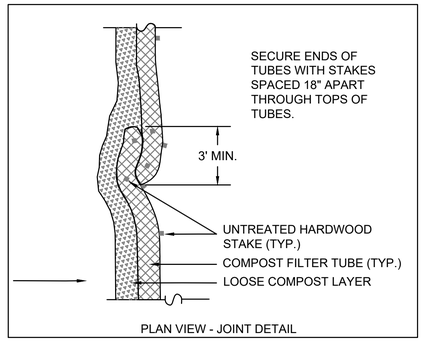
OF 14632



HOR. SCALE IN FEET
5 0 5 10
5 0 5 10
VER. SCALE IN FEET





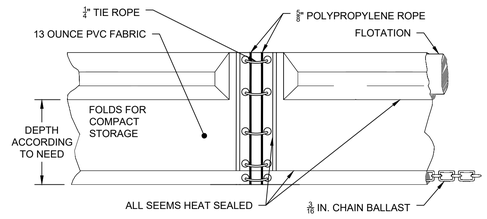


GENERAL NOTES:

1. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR BIODEGRADABLE MATERIAL APPROVED BY ENGINEER.
2. TUBES SHALL BE TAMPED IN PLACE TO INSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
3. PROVIDE A MINIMUM TUBE DIAMETER OF 12" FOR SLOPES UP TO 50' IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
4. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
5. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
6. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
7. PROVIDE A 3' MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW.
8. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.
9. SECURE ENDS OF TUBES WITH STAKES SPACED 18" APART THROUGH TOPS OF TUBES.

1 * COMPOST FILTER TUBE
NTS

* = SHT-4 THROUGH SHT-9



2 * FLOATING SILT CURTAIN
NTS

* = SHT-4 THROUGH SH-9

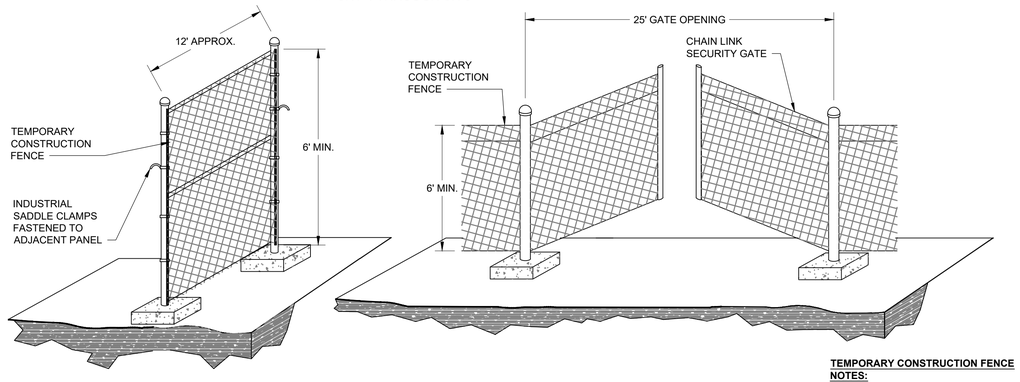
MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	16	18
	CONTRACT NO. P17-2724-X2A		

SITE PREPARATION & EROSION CONTROL DETAILS

FLOATING SILT CURTAIN NOTES:

1. SILT CURTAIN SHALL BE TYPE I WITH MINIMUM CURTAIN WEIGHT OF 13 OZ. PER SQ. YD.
2. ALL CURTAIN ANCHOR POINTS SHALL HAVE SUFFICIENT HOLDING POWER TO RETAIN THE CURTAIN UNDER THE EXISTING CONDITIONS.
3. THE FURLED CURTAIN SHALL BE SECURED TO THE UPSTREAM ANCHOR POINT AND THEN SUBSEQUENTLY ATTACHED TO EACH DOWNSTREAM ANCHOR POINT UNTIL THE ENTIRE CURTAIN IS IN POSITION.
4. THE FURLING LINES SHALL NOT BE CUT UNTIL EACH LOCATION IS ASCERTAINED AND INSPECTED.
5. ANCHOR LINES SHALL BE ATTACHED TO THE FLOTATION DEVICE AND NOT TO THE BOTTOM OF THE CURTAIN.
6. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TO THIS DETAIL. SILT CURTAIN SUBJECT TO AECOM ENGINEER APPROVAL.
7. REMOVE THE BARRIER CAREFULLY WHEN THE WORK IS COMPLETED AND AFTER SUSPENDED SEDIMENTS HAVE BEEN ALLOWED SUFFICIENT TIME TO SETTLE OUT.

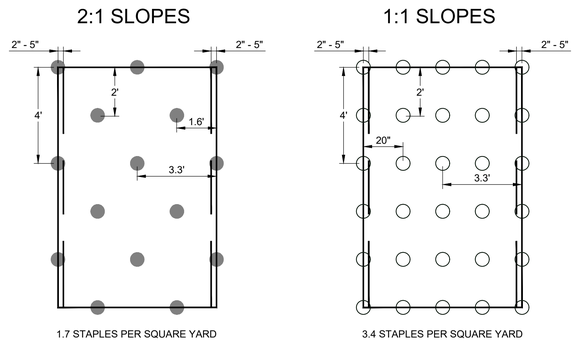


3 * TEMPORARY CONSTRUCTION FENCE
NTS

* = SHT-6 & SHT-9

TEMPORARY CONSTRUCTION FENCE NOTES:

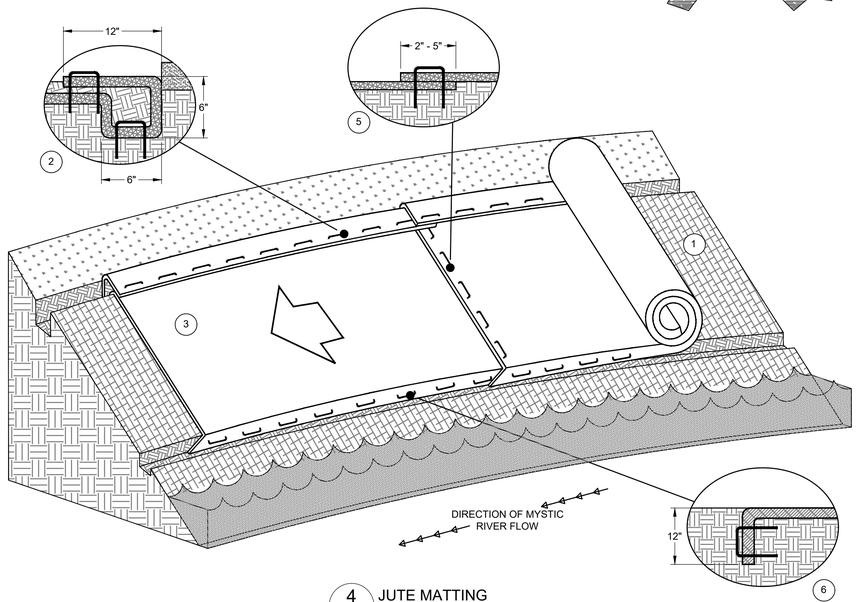
1. ALL TEMPORARY CONSTRUCTION FENCE SHALL HAVE VISUAL BARRIER FABRIC SECURED TO CHAIN LINK MESH.



STAPLE PATTERN GUIDE

STAPLE PATTERN NOTES:

1. THE AECOM ENGINEER AND CONTRACTOR SHALL SELECT THE APPROPRIATE STAPLE/STAKE TYPE AND LENGTH. STAPLES/STAKES SHALL BE SELECTED TO HOLD THE MAT IN INTIMATE CONTACT WITH THE SOIL SUBGRADE AND RESIST PULLOUT.
2. STAPLES AND/OR STAKES SHOULD BE AT LEAST 6 INCHES IN LENGTH AND WITH SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. LONGER STAPLES AND/OR STAKES MAY BE NEEDED IN LOOSER SOILS.



4 * JUTE MATTING
NTS

* = SHT-10 THROUGH SHT-15

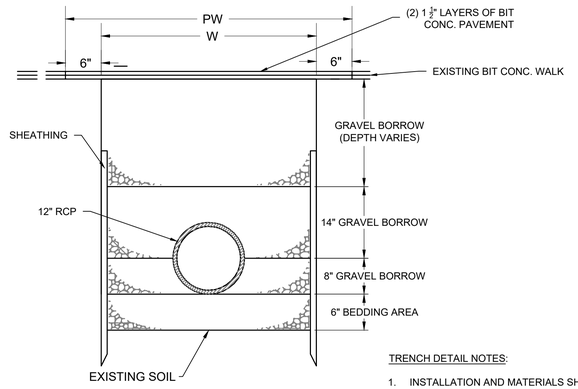
JUTE MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS. PREPARE SOIL INCLUDING ANY NECESSARY APPLICATION OF SOIL AMENDMENTS SUCH AS LIME OR FERTILIZER.
2. BEGIN AT THE TOP OF THE SHORELINE BY ANCHORING THE JUTE MATTING IN A 6 INCH DEEP BY 6 INCH WIDE TRENCH WITH APPROXIMATELY 12 INCHES OF B/M EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE B/M WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12 INCHES APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. COMPACT SOIL AND FOLD REMAINING 12 INCH PORTION OF B/M BACK OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12 INCHES ACROSS THE WIDTH OF THE B/M.
3. CONTRACTOR AND ENGINEER SHALL DISCUSS WHETHER TO ROLL THE JUTE MATTING VERTICALLY DOWN THE SLOPE OR ACROSS THE SHORELINE SLOPE PRIOR TO INSTALLATION. JUTE MATTING SHALL BE ROLLED IN A CONTROLLED FASHION. JUTE MATTING SHALL NOT BE ALLOWED TO ROLL DOWN THE SLOPE ON ITS OWN. LAY JUTE MATTING LOOSELY AND STAKE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH. ALL JUTE MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. INSTALL JUTE MATTING OVER ENTIRE PLANTING AREA. AVOID EXISTING TREES AND EXISTING STUMPS.
5. IF NEEDED, PLACE CONSECUTIVE JUTE MATTING END OVER END (SHINGLE STYLE) WITH A 2 INCH TO 5 INCH OVERLAP. SEAM OVERLAPS SHOULD BE SHINGLED IN THE PREDOMINANT FLOW DIRECTION. STAPLE/STAKE THROUGH OVERLAPPED AREAS, APPROXIMATELY 12 INCHES APART ACROSS ENTIRE JUTE MATTING WIDTH.
6. THE EDGES OF THE JUTE AT OR BELOW THE BANK LINE MUST BE ANCHORED BY PLACING THE JUTE MATTING IN A 12 INCH DEEP BY 6 INCH WIDE ANCHOR TRENCH. ANCHOR THE JUTE AMTTING WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12 INCHES APART IN THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	17	18
	CONTRACT NO. P17-2724-X2A		

RESTORATION DETAILS



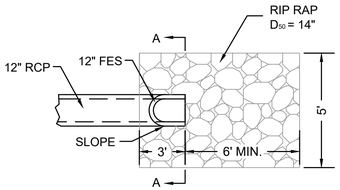
W = MAX TRENCH WIDTH = 4'
PW = MAX PAVING WIDTH = W+1'
OD = 16"
UNSHEATHED TRENCH: W = D+2' (WITH 3' MIN)

TRENCH DETAIL NOTES:

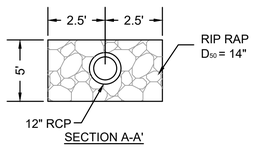
1. INSTALLATION AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT VERSION OF MASSDOT STANDARDS SPECIFICATIONS FOR HIGHWAY AND BRIDGES.
2. GRAVEL BORROW SHALL BE TYPE C PLACED AND COMPACTED IN 6" LIFTS TO 95% STANDARD PROTOR.
3. PIPE BEDDING SHALL BE AASHTO #57 CRUSHED STONE.
4. PIPE BELLS SHALL BE RECESSED INTO STONE.

5 * TRENCH DETAIL
NTS

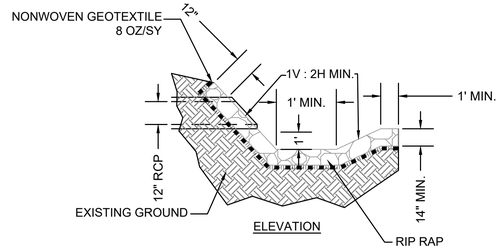
* = SHT-7 THROUGH SHT-15



PLAN



SECTION A-A'

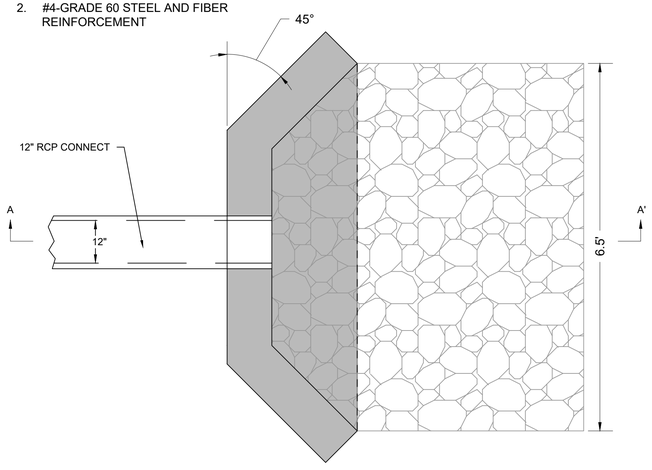


ELEVATION

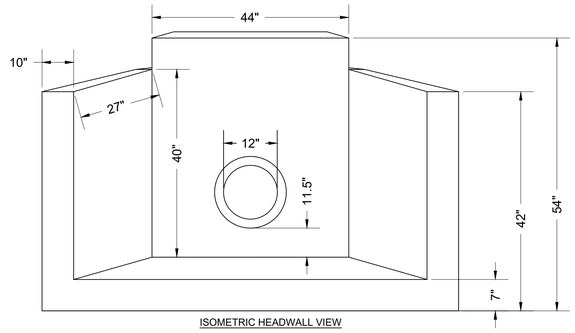
6 * PLUNGE POOL DETAIL
NTS

* = SHT-12 & SHT-15

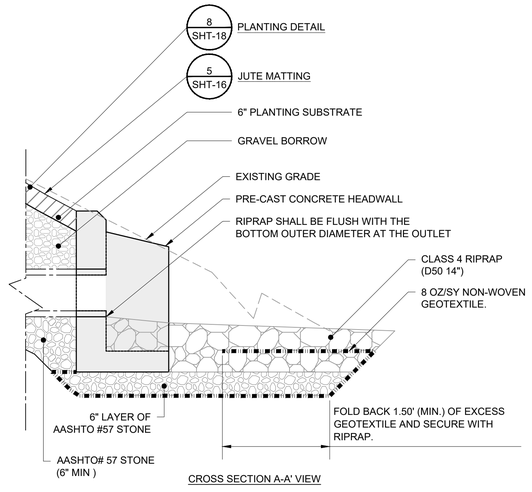
HEADWALL NOTES:
1. 5,000 PSI CONCRETE
2. #4-GRADE 60 STEEL AND FIBER REINFORCEMENT



PLAN VIEW



ISOMETRIC HEADWALL VIEW



CROSS SECTION A-A' VIEW

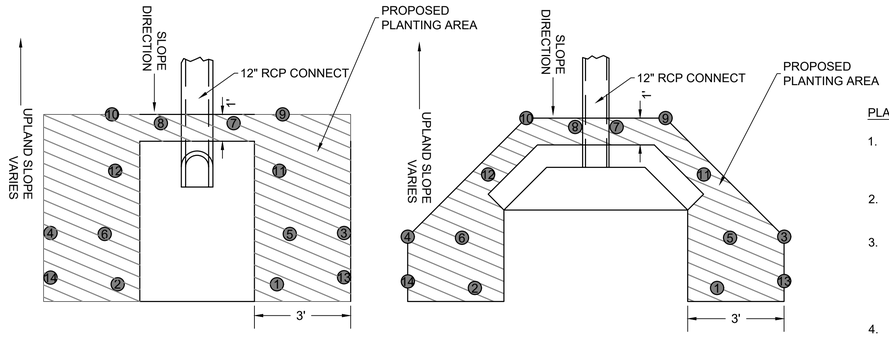
7 * HEADWALL DETAIL
NTS

* = SHT-10 THROUGH SHT-15

MYSTIC VALLEY PARKWAY
OUTFALL RESTORATION PROJECT
AS-BUILT

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NOT APPLICABLE	18	18
	CONTRACT NO. P17-2724-X2A		

PLANTING DETAILS



PLUNGE POOL PLANTING

HEADWALL PLANTING

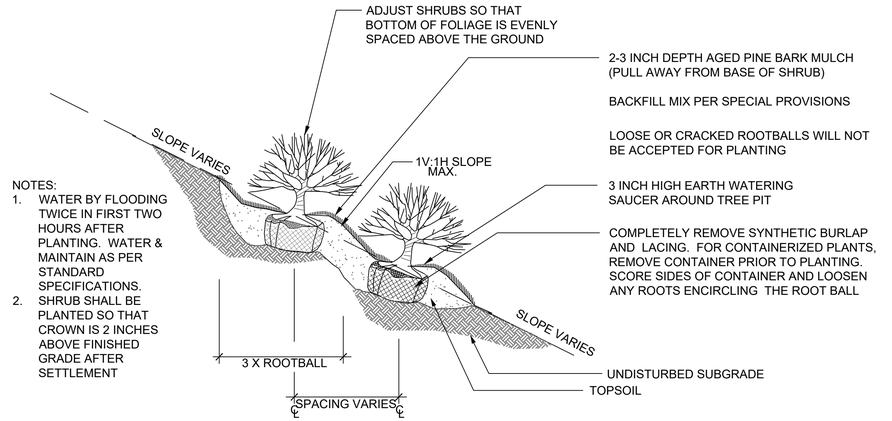
PLANTING DETAIL NOTES:

1. A MAXIMUM OF 14 PLANTS WILL BE INSTALLED AROUND THE NEWLY CONSTRUCTED RIP-RAP SWALES
2. SPECIES TO BE PLANTED WILL VARY DEPENDING UPON AVAILABILITY.
3. SUBSTITUTIONS MAY BE MADE IF PLANT SPECIES DEPICTED ON THE PLANTING SCHEDULE ARE NOT AVAILABLE. ALL SUBSTITUTIONS WILL BE PLANTS NATIVE TO MASSACHUSETTS.
4. ALL DISTURBED AREAS, OUTSIDE THE RIP RAP AREA, SHALL BE SEEDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AT A RATE OF 25 LB/ACRE.

PLANTING SCHEDULE

PLANT No.	LATIN NAME	COMMON NAME	TOTAL	SIZE	SPACING	DETAIL
1 — 2	Osmunda cinnamomea	CINNAMON FERN	18	1 GAL.	1' C/C	10
3 — 4	Lindera benzoin	SPICEBUSH	18	1 GAL.	8' - 10' C/C	9
5 — 6	Viburnum acerifolium	MAPLE-LEAF VIBURNUM	18	1 GAL.	2' - 3' C/C	9
7 — 8	Vaccinium pallidum	LATE LOWBUSH BLUEBERRY	18	1 GAL.	2' - 2.5' C/C	9
9 — 10	Ilex verticillata	COMMON WINTERBERRY	18	1 GAL.	6' - 8' C/C	9
11 — 12	Vaccinium corymboum	HIGHBUSH BLUEBERRY	18	1 GAL.	2' - 2.5' C/C	9
13 — 14	Acer rubrum	RED MAPLE	18	3 - 4'	8' - 10' C/C	11

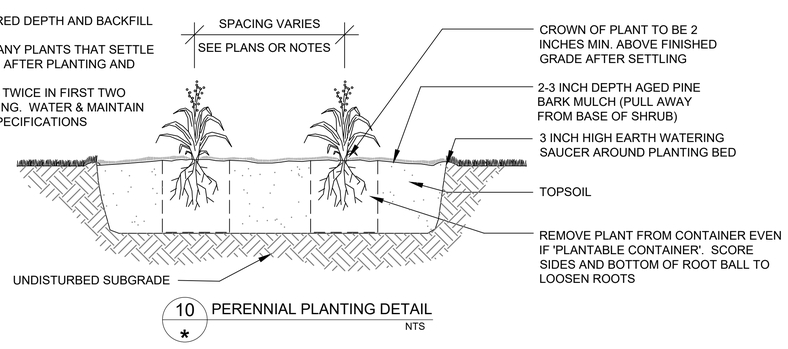
8 PLANTING DETAIL
NTS
* = SHT-10 THROUGH SHT-12



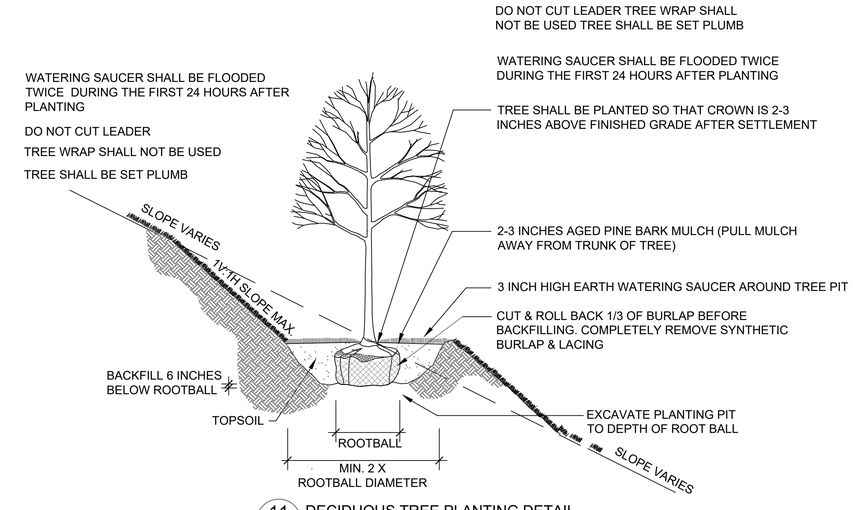
NOTES:
1. WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS.
2. SHRUB SHALL BE PLANTED SO THAT CROWN IS 2 INCHES ABOVE FINISHED GRADE AFTER SETTLEMENT

9 SHRUB PLANTING DETAIL
NTS
* = SHT-18

NOTES:
1. EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX.
2. RAISE AND REPLANT ANY PLANTS THAT SETTLE MORE THAN 3 INCHES AFTER PLANTING AND WATERING IN.
3. WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS



10 PERENNIAL PLANTING DETAIL
NTS
* = SHT-18



11 DECIDUOUS TREE PLANTING DETAIL
NTS
* = SHT-18

Town of Arlington, Massachusetts

Enforcement Order: 66R Dudley Street.

Summary:
Enforcement Order: 66R Dudley Street.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	66R_Dudley_Enforcement_Order_Cover_Letter.pdf	66R Dudley Enforcement Order Cover Letter
🗋	Reference Material	66R_Dudley_Street_Enforcement_Order_10122023.pdf	66R Dudley Street Enforcement Order 10122023
🗋	Reference Material	66-66R_Dudley_Street_Aerials_2014_to_2023.pdf	66-66R Dudley Street Aerials 2014 to 2023
🗋	Reference Material	66_Dudley_Notice_of_Noncompliance_-_2014.pdf	66 Dudley Notice of Noncompliance - 2014
🗋	Reference Material	66_Dudley_Notice_of_Violation_-_2004.pdf	66 Dudley Notice of Violation - 2004

TOWN OF ARLINGTON

MASSACHUSETTS

CONSERVATION COMMISSION

October 12, 2023 BY CERTIFIED MAIL

Robert Castelluccio and Salvatore Lorusso
S & R Realty Trust
66R Dudley Street
Arlington, MA 02476

RE: Wetland Violations at 66-66R Dudley Street

The Arlington Conservation Commission believes that you have violated the Wetlands Protection Act, GL c. 131, § 40, and the Arlington Bylaw for Wetland Protection, Title V, Article 8. Our observations include those activities described in the enclosed Enforcement Order. Photographs of the site evidencing the same activities are enclosed.

This letter and the enclosed Enforcement Order serve to instruct you to immediately cease and desist from any further activity, and appear before the Conservation Commission at its Thursday, November 2, 2023, meeting, 7:00 PM. The meeting will be conducted remotely using Zoom. Registration details and instructions on how to join the meeting can be found on the Conservation Commission page of ArlingtonMA.gov. Please be prepared to explain the work that has been conducted so far, and your plans for the property so that the Commission can determine the appropriate corrective actions for you to come into compliance with the Act and Bylaw. Please be advised, the Conservation Commission reserves the right to assess fines for said violations or non-compliance with this letter and Enforcement Order pursuant to the Wetlands Protection Act, GL c. 131, § 40, and the Arlington Bylaw for Wetland Protection, Title V, Article 8.

Should you have any questions or need further information, do not hesitate to contact me in the Planning Department at 781.316.3012.

Thank you for your immediate time and attention in this matter.

Sincerely,

David Morgan
Environmental Planner + Conservation Agent

Enclosure

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

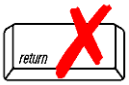
WPA Form 9 – Enforcement Order

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

A. Violation Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



This Enforcement Order is issued by:

Arlington — Conservation Commission (Issuing Authority)

10/12/2023 — Date

To:

Robert Castelluccio and Salvatore Lorusso, S & R Realty Trust
Name of Violator

66-66R Dudley Street
Address

1. Location of Violation:

Property Owner (if different)

66-66R Dudley Street
Street Address

Arlington — City/Town

02476 — Zip Code

55-2 — Assessors Map/Plat Number

30A — Parcel/Lot Number

2. Extent and Type of Activity (if more space is required, please attach a separate sheet):

Unpermitted excavation, grading, and construction

B. Findings

The Issuing Authority has determined that the activity described above is in a resource area and/or buffer zone and is in violation of the Wetlands Protection Act (M.G.L. c. 131, § 40) and its Regulations (310 CMR 10.00), because:

☒ the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone without approval from the issuing authority (i.e., a valid Order of Conditions or Negative Determination).

B. Findings (cont.)

☐ the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone in violation of an issuing authority approval (i.e., valid Order of Conditions or Negative Determination of Applicability) issued to:

Name _____ Dated _____

File Number _____ Condition number(s) _____

☐ The Order of Conditions expired on (date): _____ Date

☐ The activity violates provisions of the Certificate of Compliance.

☐ The activity is outside the areas subject to protection under MGL c.131 s.40 and the buffer zone, but has altered an area subject to MGL c.131 s.40.

☐ Other (specify):

C. Order

The issuing authority hereby orders the following (check all that apply):

☒ The property owner, his agents, permittees, and all others shall immediately cease and desist from any activity affecting the Buffer Zone and/or resource areas.

☐ Resource area alterations resulting from said activity shall be corrected and the resource areas returned to their original condition.

☐ A restoration plan shall be filed with the issuing authority on or before _____ Date

for the following:

The restoration shall be completed in accordance with the conditions and timetable established by the issuing authority.

C. Order (cont.)

☐ Complete the attached Notice of Intent (NOI). The NOI shall be filed with the Issuing Authority on or before:

Date

for the following:

No further work shall be performed until a public hearing has been held and an Order of Conditions has been issued to regulate said work.

☒ The property owner shall take the following action (e.g., erosion/sedimentation controls) to prevent further violations of the Act:

Attend the 11/2/2023 7:00 PM meeting of the Arlington Conservation Commission, establish erosion controls of a biodegradable 12" mulch sock at the limit of work

Failure to comply with this Order may constitute grounds for additional legal action. Massachusetts General Laws Chapter 131, Section 40 provides: “Whoever violates any provision of this section (a) shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than two years, or both, such fine and imprisonment; or (b) shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each violation”. Each day or portion thereof of continuing violation shall constitute a separate offense.

D. Appeals/Signatures

An Enforcement Order issued by a Conservation Commission cannot be appealed to the Department of Environmental Protection, but may be filed in Superior Court.

Questions regarding this Enforcement Order should be directed to:

Name

Phone Number

Hours/Days Available

Issued by:

Conservation Commission

Conservation Commission signatures required on following page.

D. Appeals/Signatures (cont.)

In a situation regarding immediate action, an Enforcement Order may be signed by a single member or agent of the Commission and ratified by majority of the members at the next scheduled meeting of the Commission.

Signatures:

Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name

Signature of delivery person or certified mail number


Sun Sep 14 2014
Imagery © 2023 Nearmap, HERE
20 ft
nearmap


Wed May 6 2015
Imagery ©2023 Nearmap, HERE
20 ft
nearmap


Sat Mar 19 2016
Imagery © 2023 Nearmap, HERE
20 ft
nearmap


Sat Mar 19 2016
Imagery © 2023 Nearmap, HERE
60 ft
nearmap


Sun Apr 9 2017
Imagery © 2023 Nearmap, HERE
20 ft
nearmap


Mon Apr 9 2018
Imagery © 2023 Nearmap, HERE
20 ft
nearmap


Thu Apr 11 2019
Imagery © 2023 Nearmap, HERE
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Wed Mar 11 2020
Imagery © 2023 Nearmap, HERE
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Sat Mar 27 2021
Imagery © 2023 Nearmap, HERE
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Wed Mar 23 2022
Imagery © 2023 Nearmap, HERE
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Thu Nov 24 2022
Imagery © 2023 Nearmap, HERE
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Thu Mar 30 2023
Imagery © 2023 Nearmap, HERE
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TOWN OF ARLINGTON

MASSACHUSETTS

CONSERVATION COMMISSION

DRAFT

November 5, 2014

Robert Castelluccio
10 Manhattan Dr.
Burlington, MA 01803

RE: Notice of Noncompliance – construction work at 66 Dudley St, Arlington near Mill Brook

Mr. Castelluccio,

It has been reported to and observed this morning (see attached photos) by the Arlington Conservation Commission that construction work is being done on your property within 100 feet of the bank of Mill Brook without the permission of the Arlington Conservation Commission as required by the state Wetlands Protection Act and the Arlington Wetlands Protection Bylaw.

The vegetation and land within 100 feet of a water body provides habitat to wildlife, controls runoff of the soil from the upper portions of your property, and protects the water quality and aquatic habitat and fisheries of Mill Brook.

As such, you are immediately directed to:

1. stop any and all work within 100 feet of the bank of Mill Brook.

2. install sedimentation control fabric between the construction area and Mill Brook to stabilize the soil and prevent it from washing into the water way;

3. provide the Commission office with remediation and replanting plans as well as photos of the area by November 17th, and

4. appear at the next meeting of the Conservation Commission to discuss this matter, on Thursday, November 20, 2014 at 7:45pm, second floor conference room of the

Town Hall Annex.

Please note that the Commission may initiate further enforcement proceedings that can include fines or other civil actions if this matter is not promptly or adequately addressed and corrected.

Please call Cori Beckwith, Conservation Commission Administrator, at 781-316-3012 (or email cbeckwith@town.arlington.ma.us) for any questions on the above.

Sincerely,

Nathaniel Stevens, Chair

cc: D. Heim, Town Counsel
Elaine M. Buchanan, 76 Beech St., Belmont, MA 02478
DEP

TOWN OF ARLINGTON

MASSACHUSETTS

CONSERVATION COMMISSION

DRAFT

NOTICE OF VIOLATION

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 5, 2004

Robert Castelluccio
Salvatore Lorusso
S & R Realty Trust
66 Dudley St
Arlington, MA 02476

RE: Clearing of vegetation behind 66 Dudley Street near Mill Brook

The Conservation Commission has recently been informed of significant clearing of the vegetation and work within 100 feet of Mill Brook on your property at 66 Dudley Street, please refer to the attached photographs.

This work is a violation of the Massachusetts Wetlands Protection Act and the Arlington Bylaw for Wetlands Protection in that the area within 100 feet of the waterway needs to remain vegetated in order to provide significant protection of the water quality of the brook. This area is known as the Buffer Zone and the inner riparian zone of the Riverfront Area of Mill Brook.

This area should be immediately restored to the previous condition, all structures and gravel removed, the area replanted with new trees, shrubs and groundcover in order to restore the area to its original condition.

Please note that the Commission may initiate further enforcement proceedings that can include fines or other civil actions if this matter is not promptly corrected.

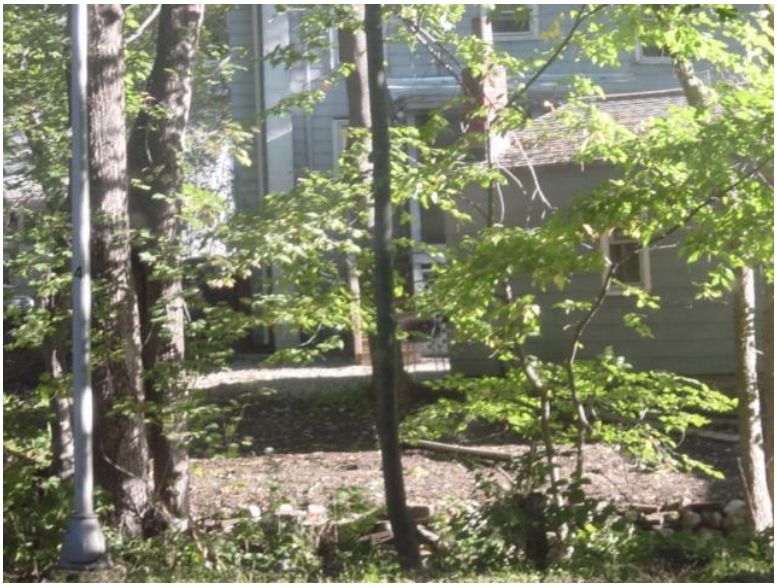
Please call Cori Beckwith at the following number for any questions on the above.

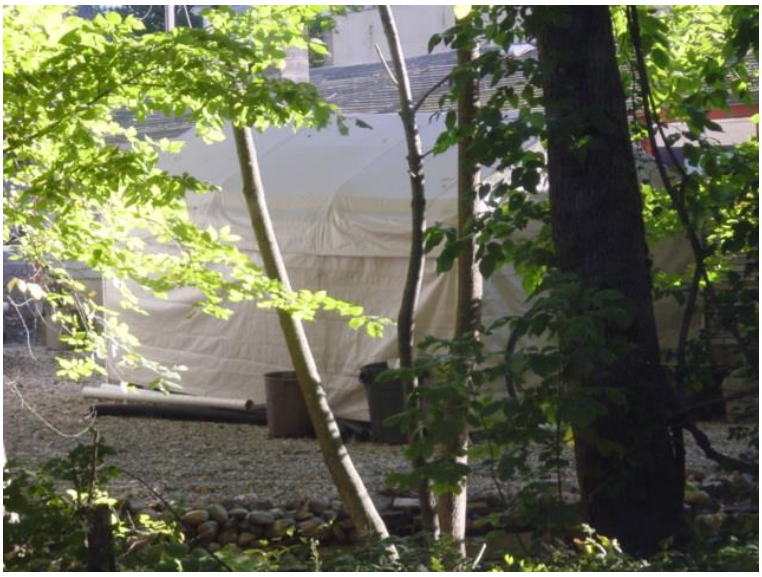
Sincerely,

TOWN HALL, 730 MASSACHUSETTS AVENUE, ARLINGTON, MA 02476
(781) 316-3012

Nathaniel Stevens
Chair

Cc: Town Counsel





Town of Arlington, Massachusetts

Notice of Violation: Watermill Place.

Summary:
Notice of Violation: Watermill Place.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Watermill_Place_-_Notice_of_Violation.pdf	Watermill Place - Notice of Violation.pdf
🗋	Reference Material	Watermill_Place_-_Order_of_Conditions_-_091-056.pdf	Watermill Place - Order of Conditions - 091-056.pdf
🗋	Reference Material	Watermill_Place_-_Certificate_of_Compliance.pdf	Watermill Place - Certificate of Compliance.pdf

Andrew Bellanger
1 Watermill Place
Arlington, MA 02476

Arlington Conservation Commission
730 Massachusetts Avenue
Arlington, MA 02476

The Arlington Conservation Commission believes that you have violated the Massachusetts Wetlands Protection Act and the Arlington Bylaw for Wetlands Protection. This means that you may have damaged wetlands or their surrounding areas.

Arlington's Conservation Agent visited the site on October 12, 2023, and found lawn area flagged for pesticide treatment. As discussed via email in May of last year, application of pesticide and herbicide within 200 feet of Mill Brook is an activity which requires permitting.

We ask that you:

- Stop all application of pesticide and herbicide within 200 feet of Mill Brook.
- Attend the November 2, 2023, meeting of the Conservation Commission to discuss future land management at Watermill Place that complies with the Wetlands Protection Act and the Arlington Bylaw for Wetlands Protection.

Issued by: _____

Printed Name: David Morgan

Date: 10/12/2023
Enclosures

Figure 1 Pesticide application flag on Watermill Place lawn #1

Figure 2 Pesticide application flag on Watermill Place lawn #2

Form 5

Commonwealth of Massachusetts

DEQE File No. 91-56
(To be provided by DEQE)

City/Town ARLINGTON

Applicant ~~SCHWAMB MILL~~ ASSOCIATES
Waterfall Place

Order of Conditions
Massachusetts Wetlands Protection Act
G.L. c. 131, §40
Arlington General and By-laws, Ch. 40 Sec. 32

From Arlington Conservation Commission

To Robert L. Green, Schwamb Mill Associates (Name of Applicant)
c/o Gadsby & Hannah
Address One Post Office Sq. Boston 02109

Larson Brothers Realty ~~David Robson~~ (Name of property owner)
24, 26 Mill Lane
Address Arlington, MA 02174

This Order is issued and delivered as follows:

☐ by hand delivery to applicant or representative on _____ (date)

☒ by certified mail, return receipt requested on September 25, 1986 (date)

This project is located at Lowell Street & Mill Lane

The property is recorded at the Registry of Middlesex South

Book (Larson) 5310 (Robson) 90903, 584 Page 92 153

Certificate (if registered) (Robson) 90903

The Notice of Intent for this project was filed on August 15, 1986 (date)

The public hearing was closed on September 4, 1986 (date)

Findings

The Arlington Conservation Commission has reviewed the above-referenced Notice of Intent and plans and has held a public hearing on the project. Based on the information available to the commission at this time, the commission has determined that the area on which the proposed work is to be done is significant to the following interests in accordance with the Presumptions of Significance set forth in the regulations for each Area Subject to Protection Under the Act (check as appropriate):

- ☐ Public water supply
- ☐ Private water supply
- ☒ Ground water supply
- ☒ Flood control
- ☒ Storm damage prevention
- ☒ Prevention of pollution
- ☐ Land containing shellfish
- ☐ Fisheries

Therefore, the Arlington Conservation Commission hereby finds that the following conditions are necessary, in accordance with the Performance Standards set forth in the regulations, to protect those interests checked above. The Conservation Commission orders that all work shall be performed in accordance with said conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications or other proposals submitted with the Notice of Intent, the conditions shall control.

General Conditions

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. This Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   (a) the work is a maintenance dredging project as provided for in the Act; or
   (b) the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance and both that date and the special circumstances warranting the extended time period are set forth in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. Any fill used in connection with this project shall be clean fill, containing no trash, refuse, rubbish or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles or parts of any of the foregoing.
7. No work shall be undertaken until all administrative appeal periods from this Order have elapsed or, if such an appeal has been filed, until all proceedings before the Department have been completed.
8. No work shall be undertaken until the Final Order has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. The recording information shall be submitted to the commission on the form at the end of this Order prior to commencement of the work.
9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words, "Massachusetts Department of Environmental Quality Engineering, File Number 91-56".
10. Where the Department of Environmental Quality Engineering is requested to make a determination and to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the Department.
11. Upon completion of the work described herein, the applicant shall forthwith request in writing that a Certificate of Compliance be issued stating that the work has been satisfactorily completed.
12. The work shall conform to the following plans and special conditions:

SPECIAL CONDITIONS FOR SCHWAMB MILL

1) The owners of the project and their successors in title, in the event they proceed to alter wetlands under this Order, agree that the Town of Arlington shall have no responsibility to maintain the proposed drainage system and that said Town shall not be liable for any damages in the event of the failure of the drainage system. By acceptance of this Order, the owners indemnify and hold harmless the Town of Arlington and its residents for any damages attributable to alterations undertaken on this property pursuant to this Order.

2) Any changes made or intended to be made in plans for this project shall be reported to the Arlington Conservation Commission for approval.

CONSTRUCTION

3) Prior to start of any construction, detailed final plans must be submitted to and approved by the Arlington Conservation Commission on the following: 1) plans for stone work around 72" culvert; 2) final landscaping plans including species of plants; 3) sanitary sewer connection plan; 4) plans for demolition, notification fifteen days prior to demolition.

4) Construction of the storm drainage system must be completed during the initial phase of construction.

5) Dust shall be controlled during construction.

6) Exposed soil areas resulting from grading will be stabilized within thirty days of completion of rough grading, by reseeding or planting appropriate ground cover; if delayed due to frozen ground, then at the next planting season.

7) Double rows of hay bales shall be used during all phases of demolition and construction along Mill Brook to prevent siltation.

8) Applicant should mark trees proposed to be removed; notification must be made to the Arlington Conservation Commission, the Director of Properties and Natural Resources, and the Measurer of Wood and Bark when this is done. The commission shall give final approval of trees to be removed.

9) Banks of Mill Brook must be left in their natural state; there shall be no riprapping of the banks. Rocks from the brook may be used, along with plantings, to stabilize the banks, especially in the steep areas.

10) Tunnel from the brook to the Mill Building must not be disturbed, but entrance to the tunnel from the brook should be screened to prevent vandalism.

11) This Order of Conditions must be incorporated as part of the Construction Contract and the prime contractor must submit in writing to the Arlington Conservation Commission, prior to commencement of construction, his notice of receipt and understanding of this Order as well as his intention to comply in full.

WATER QUALITY

12) Construction shall not impair groundwater and surface water quality.

13) Plans for all gas/oil traps/filters and complete drainage plans shall be submitted to the Arlington Conservation Commission and be approved by the Town Engineer prior to start of construction.

14) Provisions shall be taken to prevent rubbish, demolition and construction debris, or any other waste material, stone, dirt, sand or vegetative matter or any solid or liquid substance other than rain or snow surface drainage from entering any existing or new storm drain or any body of water from the site during construction or demolition or at any time thereafter.

15) Removal of any fuel or chemical tanks must be under the supervision of the Arlington Fire Department and the Arlington Conservation Commission must be notified in writing. Removal of the tanks, or any spillage or contaminated soil must be off-site. Prior to implementation, method of removal must be submitted to the Arlington Conservation Commission.

16) Soils contaminated by oil, grease, etc., if found during demolition or construction, must be removed off-site.

MAINTENANCE

17) No salt may be used on-site. Developer must erect "No-Salt Zone" signs in conspicuous locations during the winter months.

18) It is the obligation of the developer or the owners, to maintain the storm drain system and Mill Brook inperpetuity. This obligation does not end with a Certificate of Compliance being issued by the Arlington Conservation Commission.

19) Maintenance personnel will keep Mill Brook free and clear of all trash, vegetative matter, and other debris and foreign objects of every kind and description, and will clean the brook, its inlet and outlet as often as necessary to so comply. If any work other than ordinary maintenance should become necessary, the developer, or owner, must appear before the Arlington Conservation Commission with a Request for Determination of Applicability.

GENERAL CONDITIONS

20) No pesticides or herbicides are to be used on the site without prior notification to, and the elapse of fifteen (15) days during which such use is not disapproved by, the Arlington Conservation Commission and the Arlington Board of Health, and the owner agrees to enforce regulations so governing such use on the site. Care should be exercised in fertilizing lawns; fertilizers should be added only to wet grass, to minimize fertilizer runoff into Mill Brook; no fertilizer should be used near the banks of Mill Brook.

21) All equipment and material utilized on the site shall be stored away from the Mill Brook and otherwise away from or above floodwater levels.

22) Any equipment needed for work near the brook, shall not remain near the brook when not in actual use. No heavy equipment is allowed in Mill Brook during or after construction.

23) All areas on the site where mechanical equipment is being utilized shall be checked at least weekly, and more often if necessary, for deposits of oil and/or grease, and, if found, such deposits shall be removed and the equipment repaired or replaced.

24) Adequate measures shall be taken to prevent any and all effects of erosion, both during construction and thereafter, from affecting any existing or new storm drains or Mill brook waterway.

25) Adequate measures shall be taken to prevent any stormwater from entering the site from Lowell Street, Frazer Road or Thompson Street through driveway access curb cuts or by any other route.

26) No work shall be commenced under this Order until all other required permits have been obtained and all appeal periods have expired without an appeal having been taken, or if an appeal has been taken, that the same has been finally adjudicated or otherwise dismissed.

27) Final landscaping plans for the project shall be submitted and approved by the Schwamb Mill Preservation Trust and the Arlington Conservation Commission.

28) Developer must work with the MDC to try to alleviate source of methane gas odors in the area.

Plans:

Title	Dated	Signed and Stamped by:	On File with:
Topographic Plan	7/22/86	Boston Survey Consultants	A.C.C.
Illustrative Site Plan	8/04/86	C.B.T. Designs	A.C.C.
Boring Location	7/25/86	B.S.C. Engineering	A.C.C.
Elevations	7/10/86	C.B.T. Designs	A.C.C.
Utility Plan Proposed	7/22/86	B.S.C. Engineering	A.C.C.

Special Conditions (Use additional paper if necessary)

See Attached pages - twenty-eight (28) conditions

(Leave Space Blank)

Issued By ARLINGTON Conservation Commission

Signature(s) R. Bruce Whittle

Hugh J. Gillespie Jr

Roland E Chaput Jr

Eugene A. Cancellieri Lauren D Welch

This Order must be signed by a majority of the Conservation Commission.

On this 24th day of September 1986, before me personally appeared R Bruce Whittle, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

Lawrence Mahon Dec 4 1992

Notary Public My commission expires

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land upon which the proposed work is to be done or any ten residents of the city or town in which such land is located are hereby notified of their right to request the Department of Environmental Quality Engineering to issue a Superseding Order, providing the request is made by certified mail or hand delivery to the Department within ten days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

Detach on dotted line and submit to the _____ prior to commencement of work.

To _____ Issuing Authority

Please be advised that the Order of Conditions for the project at _____

File Number _____ has been recorded at the Registry of _____ and

has been noted in the chain of title of the affected property in accordance with General Condition 8 on _____ 19____

If recorded land, the instrument number which identifies this transaction is _____

If registered land, the document number which identifies this transaction is _____

Signature _____ Applicant

5-4A

Watermill File

Form 8

Commonwealth of Massachusetts

DEQE File No. 91-56
(To be provided by DEQE)

City/Town Arlington

Applicant Schwamb Mill Associates

Certificate of Compliance
Massachusetts Wetlands Protection Act, G.L. c. 131, §40
and Arlington Gen. By-Laws, c. 40, §32

From Arlington Conservation Commission Issuing Authority

To Schwamb Mill Associates (Name) c/o Gadsby & Hannah One Post Office Sq. Boston MA 02109 (Address)

Date of Issuance 3-9-89

This Certificate is issued for work regulated by an Order of Conditions issued to Schwamb Mill Associates dated 9-25-86 and issued by the Arlington Conservation Com.

1. ☒ It is hereby certified that the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

2. ☐ It is hereby certified that only the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed: (If the Certificate of Compliance does not include the entire project, specify what portions are included.)

3. ☐ It is hereby certified that the work regulated by the above-referenced Order of Conditions was never commenced. The Order of Conditions has lapsed and is therefore no longer valid. No future work subject to regulation under the Act may be commenced without filing a new Notice of Intent and receiving a new Order of Conditions.

(Leave Space Blank)

4. ☒ This certificate shall be recorded in the Registry of Deeds or the Land Court for the district in which the land is located. The Order was originally recorded on 11-14-86 (date) at the Registry of Middlesex South, Book ________, Page ________.

5. ☒ The following conditions of the Order shall continue: (Set forth any conditions contained in the Final Order, such as maintenance or monitoring, which are to continue for a longer period.)

#1, #2, #6, #9, #10, #14, #17, #18, #19, #20 #21, #22, #24 #25, #28.
We also request the name of Trustee Association, and address and Telephone number of contact person,

Issued by Arlington Conservation Commission

Signature(s) Stephen J. Gilligan CHAIRMAN

[signature] Eugene A. Camelliere
R. Bruce Wheltle [signature]
Roland E Chaput Thomas J. Walsh

When issued by the Conservation Commision this Certificate must be signed by a majority of is members.

On this 7th day of March, 19 89, before me personally appeared Thomas Walsh, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

[signature] ________ 10/4/92 ________

Notary Public — My commission expires

Detach on dotted line and submit to the ________

To ________ Issuing Authority

Please be advised that the Certificate of Compliance for the project at ________

File Number ________ has been recorded at the Registry of ________

and has been noted in the chain of title of the affected property on ________, 19 ________

If recorded land, the instrument number which identifies this transaction is ________

If registered land, the document number which identifies this transaction is ________

Signature ________ Applicant

Symmes Conservation Restriction.

Summary:
Symmes Conservation Restriction.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Symmes_Conservation_Restriction_-_Forest_Restoration_and_Invasives_Species_Mitigation_Management_Plan.pdf	Symmes Conservation Restriction - Forest Restoration and Invasives Species Mitigation Management Plan.pdf
🗋	Reference Material	Symmes_Conservation_Restriction_-_Survey.pdf	Symmes Conservation Restriction - Survey.pdf

ASCA RCA #766
Registered Consulting Arborist

MCA #41801

Plant Healthcare Consultants, Inc.

American Society of Consulting Arborist ▪ International Society of Arboriculture
Massachusetts Arborist Association ▪ Massachusetts Tree Wardens and Foresters Association
TREE INVENTORIES ▪ APPRAISALS ▪ DIAGNOSIS ▪ TREE RISK ASSESSMENTS

BCMA #TX-1357B

MQTW #1097

Forest Restoration and Invasive Species Mitigation Management Plan

Summer Street Woods CR/Arlington 360
Arlington, MA 02474

Prepared for:

Adam Post, Construction Project Manager
Greystar
One Federal Street, Suite 1804
Boston, MA 02110

Prepared by:

Daniel E. Cathcart
Registered Consulting Arborist
Plant Healthcare Consultants, Inc.
134 Allen Street
Braintree, MA 02184

June 18, 2023

Daniel E. Cathcart
Plant Healthcare Consultants, Inc.
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Summary

I was retained as a Consulting Arborist to develop a forest restoration and invasive species management plan (the "Plan") for the Summer Street Woods Conservation Restriction (the "CR") located in Arlington, MA. The purpose of the Plan is to evaluate the condition of the CR and present an outline that is in alignment with The Town of Arlington's Conservation Commission Amended and Restated Agreement for Management of the Conservation Area. This Plan includes the current profile of the CR, a summary of invasive species populations, a multi-year policy for reducing the population of invasive species, and a multi-year restoration planting strategy for the CR.

To create the Plan, I performed an inventory of the invasive species within the CR. I identified individual trees and shrubs (or patches of invasive species if more appropriate), numbered and geolocated them on a GIS map. With this data I developed a plan that will encompass removing and control the invasives and restore the CR by planting native species to the site. A component of this Plan is the timeline and specifications for the performing tree care operations.

I found the entirety of the site to be approximately 18 acres. Of that, approximately 8.25 acres is woodland protected by the CR. In that 8.25 acres I identified 665 individual invasive trees including, Norway maple (*Acer platanoides*), Tree of Heaven (*Ailanthus altissima*), black locust (*Robinia pseudoacacia*), boxelder (*Acer negundo*). In addition to the invasive species, I identified 24 standing dead trees of various species and several dead, fallen trees and debris piles that will be removed as part of the Plan.

I also located approximately 10,400 sq ft of invasive shrubs including, common buckthorn (*Rhamnus cathartica*), wild rose (*Rosa multiflora*), Japanese knotweed (*Fallopia japonica*), winged euonymus (*Euonymus alatus*), and Oriental bittersweet (*Celastrus orbiculatus*). While not classified as invasive, this area also includes several areas of poison ivy (*Toxicodendron radicans*), which is noxious, and for purposes of this Plan will be included as an invasive plant. A complete plant inventory and map of locations is included in this Plan.

The Plan outlines a five-year approach to removing and controlling invasive species and reintroducing native trees and shrubs to the CR. Roughly twenty percent of the trees and invasive shrubs/vines will be removed annually. An average of 125 individual trees and 2,080 sq ft of shrubs/vines will be removed each year. The exact

number of tree removals and areas of shrubs treated will vary each year based on analysis of plant density, access, location, etc., and are defined in the Specifications Section of the Plan. In addition to the physical removal, the invasive shrubs and vines will be treated with an herbicide material to minimize regrowth.

The Plan also presents a revegetation schedule to restore the site with native species of trees and shrubs that have been marginalized by the expansion of the invasive species populations. Approximately 75 native trees and 25 native shrubs will be planted annually. The Plan includes erosion control measures and provisions for the development of passive recreational land use. The restoration specifications are included in this Plan.

***Note – This Plan was created based on the conditions of the site at the time of my field visits. This is a preliminary Plan and may be modified and adjusted once the final land survey is completed and the monument markers are placed.*

Introduction

Background & History

Arlington 360 is a mix-income family community located on the 18-acre site of the former Symmes Hospital in Arlington, MA. The community is comprised of 176 residential townhome and apartment units, amenity buildings, common green spaces and a 90-unit assisted living facility. The development is surrounded by the Summer Street Woods Conservation Restriction.

The purpose of the Conservation Restriction is to protect and preserve the character and integrity of the forested area for the publics use in perpetuity. The protected, woodland areas comprise approximately 8.25 acres of urban forest, which provides both a buffer between the residential use and the public open space for passive recreation use and appreciation of the natural environment and wildlife.

Upon initial approval of the project the Town of Arlington required, as a condition of the project, that a multi-year forestry management plan be developed. The plan would outline the removal of the invasive species in the CR and restore the site with native species, allowing the site to be a passive recreation area for the residents of Arlington to enjoy.

While a plan was created in 2012, to date, I am not aware that the proposed work has been completed. In 2023, Adam Post, Regional Construction Project Manager for Greystar Construction Services became intimately involved with project as owner's representative for Arlington 360. As such, Greystar is now acting as the owner's liaison to deliver the Town of Arlington's stipulations and make the site compliant.

On April 25, 2023, Adam Post of Greystar, contacted my office inquiring to retain my services as a Consulting Arborist to create a current and up-to-date forest management plan that targets removing the invasive species and restoring the CR. I agreed to accept the project and entered into a contract with Greystar on May 30, 2023.

Assignment

The scope of my assignment was to create a Forest Restoration and Invasive Species Mitigation Management Plan for the Summer Street Woods CR that is compliant with the requirements set forth by the Town of Arlington. Specific services are outline below:

1. Initial Assessment and Management Plan (Year 1)
    a. Site visits as required to gather data to complete the scope of work for this project,
    b. Inventory each parcel of the site to determine species diversity and populations,
    c. Assess the health, condition, and safety of the flora in each parcel and highlight invasive species,
    d. Geolocate specific invasive trees and high concentrations of invasive shrubs as well as high-risk trees,
    e. Summarize tree and shrub data,
    f. Recommend actions to improve safety, reduce invasive species and restore with native species plants,
    g. Develop written management plan compiling all the data and recommendations discovered during the field work in this project,
    h. and
    i. Revise and update report upon the request of the Client or Arlington's Conservation Committee.

2. Various Meeting
    a. Weekly team meetings for status updates and adjustments,
    and
    b. Semimonthly Arlington Conservation Committee meetings.

Limits of Assignment

The recommendations and conclusions provided in this report are based on my visual observations only. I did not examine the plant's interiors, nor did I collect soil or plant tissue samples for laboratory testing.

This Plan was created based on the conditions of the site at the time of my field visits. This is a preliminary Plan and may be modified and adjusted once the final land survey is completed and the monument markers are placed.

Purpose and Use of Report

This report is meant to outline and support the opinions and observations used to create the Plan. It is a blueprint to the tree care operations and restoration of the CR.

The report is intended to provide the steps and procedure required to attain compliance set forth by the Town of Arlington.

This report is the property of Greystar and may be used and shared as it deems necessary.

Observations

I performed three site visits to collect the data required for this Plan:

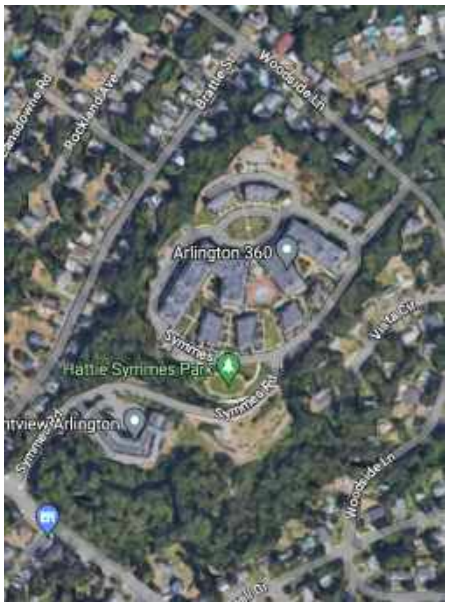
- May 31, 2023
- June 3, 2023
- June 10, 2023

During these visits I made observation, identified invasive species, numbered each tree, shrub, or vine, and Geolocated each plant with a Trimble R1, submeter GNSS receiver.

Specific observations are listed below.

Site

Arlington 360 was developed atop a hill, on approximately 18 acres in central Arlington, MA. The location is primarily ledge with some stark drop-offs and elevation changes. The complex has two components, the residential apartments, and townhomes at the summit of the hill, and an assisted living facility situated along the main drive, about halfway up the hill.



Map 1 – Google Maps – Aerial View of Site

Map 2 – Google Topographical Map of Site

The location of the development is within the Summer Street Wood CR. There is approximately 8.25 acres of woodlands that are protected under the CR. Much of the vegetation has grown and adapted to the harsh growing conditions. The rugged terrain and ledge limited the development of a truly diverse tree population. The majority of the site contain mixed hardwood trees with a few conifers. The understory trees, shrubs and vines consist of both native and introduced species – some considered invasive or noxious. The overall health of the plants is in fair to good condition considering the history of the property.

There is a large population of invasive species on the site. Invasive species tend to proliferate in unforgiving growing conditions. Their adaptability is partially the reason they have been deemed invasive. The fact that the area once served as a town nursery for growing Norway maples it is not surprising that the population of this invasive species is pervasive.

When evaluating the entire wooded area, with a focus on the removal and control of invasive species and replanting the site with native species, I divided the area into 5 distinct areas. The map below indicates the entire 8.25 acres of woodland, outlined in red. The next map shows this area broken into the 5 individual work areas.

Map 3 – Map of Woodlands included in this Plan

Map 4 – Map of Defined Areas

The Areas where carefully and strategically selected based on population of trees, ease of access, proximity to roads, total DBH of plants to be removed, and future planting efforts.

Plants – Full Property

Entering the site from the southwest corner of the property I noted a heavily forested area to the east of the entry road. I climbed the driveway, passing the assisted living facility on the right side. Along the climb there was exposed ledge and some significant sheer rockfaces. Continuing up the driveway I reached the summit of the hill and found the residential apartments and town homes. I noted the entire development was surround, to varying degrees, with naturally wooded land.

I began my inspection at the northeast corner of the property, along Old Hospital Road, and worked count-clockwise around the site. I noted the make-up of the naturally wooded areas to consist of primarily deciduous trees, maples, oaks, hickory, black cherry and a host of invasive trees and shrubs. There were several conifers in the upper portion of the site, but the area was predominantly a deciduous forest.

While conducting my inventory I identified 665 invasive trees, 4" in diameter at breast height ("DBH") and larger. I also identified standing and fallen dead trees. Additionally, approximately 10,400 square feet of invasive and noxious shrubs and vines were located. I geolocated each plant and placed it in an ArcGIS map. The entire population is difficult to digest on the complete map, so I have also provided maps of each defined Area (see Appendix A – Maps, pages 22 – 37).

The table below is a summary of the count of trees and square footage of shrub beds found over the entire site. A detailed inventory of all the trees and shrubs are included in the report (see Appendix B – Inventory, pages 38 – 72).

Trees			**Shrubs**		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Norway Maple	*Acer platanoides*	420	Tree of Heaven	*Ailanthus altissima*	7804
Tree of Heaven	*Ailanthus altissima*	138	Boxelder	*Acer negundo*	788
Black Locust	*Robina pseudoacacia*	58	Knotweed	*Fallopia japonica*	787
Boxelder	*Acer negundo*	16	Wild Rose	*Rosa multiflora*	420
Buckthorn	*Rhamnus cathartica*	4	Buckthorn	*Rhamnus cathartica*	389
Wild Rose	*Rosa multiflora*	4	Poison Ivy	*Toxicodendron radicans*	251
Knotweed	*Fallopia japonica*	2			
Poison Ivy	*Toxicodendron radicans*	1			
Other/Dead	Various ssp.	22			
	Total Tree Count	**665**		**Total Sq. Ft.**	**10,438**

Table 1 – Site Summary

Below is a map of the entire site with all invasive trees, shrubs, and vines plotted. The designated Areas are outlined for reference.

Map 5 – All Trees, Shrubs and Vines

Area 1

This section comprises the north and east sides of the property, including the triangle of land between Symmes Road and Symmes Cir. As this area surrounds the majority of the residences it has the most interaction with finished landscape. The protected CR land has transition into landscape plantings. With the exception of the triangle of land, the depth of the woodland, acting as a buffer with neighboring sites, is the narrowest.

This area is approximately 2.25 acres. Despite it being one on the larger areas in size, this area is also most accessible, due to roads and open common areas. The Plan accounts for this as the determination for removal and control distribution was considered.

The following table is a summary of the plants in Area 1.

Trees			Shrubs		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Tree of Heaven	*Ailanthus altissima*	82	Tree of Heaven	*Ailanthus altissima*	2684
Norway Maple	*Acer platanoides*	70	Wild Rose	*Rosa multiflora*	270
Black Locust	*Robina pseudoacacia*	10	Poison Ivy	*Toxicodendron radicans*	93
Boxelder	*Acer negundo*	9	Boxelder	*Acer negundo*	51
Wild Rose	*Rosa multiflora*	4			
Poison Ivy	*Toxicodendron radicans*	1			
Other/Dead	Various ssp.	11			
	Total Tree Count	**187**		**Total Sq. Ft.**	**3,098**

Table 2 – Area 1 Summary

Area 2

This section is part of the larger, heavily wooded area on the south side of the property. It is bounded by Summer Street to the south, the assisted living facility to the north, Symmes Road to the west and Area 2 to the east. This area has a high concentration of mature trees, the majority of which are Norway maples. In this area there are dead tree standing in place as well as ones that have fallen. There are also several significant debris piles, resulting from previous tree failures.

This area is approximately 1 acre. It is one on the smaller areas in size but has a high tree volume. There is some accessibility from Summer Street as well as Symmes Road. Clearing of Area 2 is critical to allow access into the area 3, 4, & 5.

The following table is a summary of the plants in Area 2.

Trees			Shrubs		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Norway Maple	*Acer platanoides*	108	Tree of Heaven	*Ailanthus altissima*	647
Tree of Heaven	*Ailanthus altissima*	9	Knotweed	*Fallopia japonica*	787
Black Locust	*Robina pseudoacacia*	3	Buckthorn	*Rhamnus cathartica*	243
Buckthorn	*Rhamnus cathartica*	3	Wild Rose	*Rosa multiflora*	90
Other/Dead	Various ssp.	4	Poison Ivy	*Toxicodendron radicans*	90
			Boxelder	*Acer negundo*	31
	Total Tree Count	**127**		**Total Sq. Ft.**	**1,176**

Table 3 – Area 2 Summary

Area 3

This section is another part of the larger, heavily wooded area on the south side of the property. It is bounded by Summer Street to the south, the assisted living facility to the north, Area 2 to the west, and Area 4 to the east. This area has a high concentration of mature trees, the majority of which are Norway maples. In this area there are dead tree standing in place as well as ones that have fallen.

This area is approximately 1.25 acre. It is one on the smaller areas in size but has a high tree volume. There is some accessibility from Summer Street as well as Symmes Road via Area 2.

Trees			Shrubs		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Norway Maple	*Acer platanoides*	82	Tree of Heaven	*Ailanthus altissima*	199
Black Locust	*Robina pseudoacacia*	17	Buckthorn	*Rhamnus cathartica*	145
Tree of Heaven	*Ailanthus altissima*	6	Poison Ivy	*Toxicodendron radicans*	68
Other/Dead	Various ssp.	3	Wild Rose	*Rosa multiflora*	60
	Total Tree Count	**108**		**Total Sq. Ft.**	**473**

Table 4 – Area 3 Summary

Area 4

This section is part of the larger, heavily wooded area on the south side of the property. It is bounded by Summer Street to the south, the assisted living facility and Symmes Road to the north, Area 3 to the west and Area 5 to the east. This area has a high concentration of mature trees, the majority of which are Norway maples.

This area is approximately 1.5 acres. Access is challenging and it is critical that Areas 2 & 3 are cleared first to allow accessibility. There is no accessibility from Summer Street or Symmes Road for removal operations except through Areas 2 & 3.

Trees			Shrubs		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Norway Maple	*Acer platanoides*	82	Boxelder	*Acer negundo*	387
Black Locust	*Robina pseudoacacia*	12	Tree of Heaven	*Ailanthus altissima*	210
Tree of Heaven	*Ailanthus altissima*	4			
Boxelder	*Acer negundo*	3			
Buckthorn	*Rhamnus cathartica*	1			
Other/Dead	Various ssp.	4			
	Total Tree Count	**106**		**Total Sq. Ft.**	**596**

Table 5 – Area 4 Summary

Area 5

This section is a combination of part of the larger, heavily wooded area on the south side of the property, as well as a more accessible area along the easter portion of the property adjacent to Symmes Circle and Old Hospital Road. It is bounded by residential properties to the south, Symmes Road to the north, Area 4 to the west and residential properties to the east. This area has a high a more diverse distribution of mature and smaller trees, the majority of which are Norway maples.

This area is approximately 2.25 acres. Of that, approximately 2 acres is adjacent and similar to area 4 while .25 acres is easily accessible via Symmes Circle and Old Hospital Road. Access the lower are challenging and will require passing through Areas 2, 3, & 4.

Trees			Shrubs		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Sq. Ft.**
Norway Maple	*Acer platanoides*	78	Tree of Heaven	*Ailanthus altissima*	4,063
Tree of Heaven	*Ailanthus altissima*	37	Knotweed	*Fallopia japonica*	712
Black Locust	*Robina pseudoacacia*	16	Boxelder	*Acer negundo*	302
Boxelder	*Acer negundo*	4			
Knotweed	*Fallopia japonica*	1			
Other/Dead	Various ssp.	1			
	Total Tree Count	**137**		**Total Sq. Ft.**	**5,077**

Table 6 – Area 5 Summary

Discussion

Invasive Species Control

The focus of this Plan is to remove the invasive plants in the CR and restore the site with native trees and shrubs. To achieve this goal, it is important to understand invasive species and effective management policies.

A widely accepted definition of invasive plant is "non-native species that have spread into native or minimally managed plant systems. These plants cause economic or environmental harm by developing self-sustaining populations and becoming dominant and/or disruptive to those systems."

The introduced invasive plants of greatest concern, both nationwide and to the Commonwealth of Massachusetts, have various biological traits providing them with competitive advantages over native species. In addition, having been transported out of their native environment, invasive plant species are free from the evolved, biological controls that manage population expansions and maintain biological diversity. Without these constraints, invasives have monopolized natural communities, displacing a wide range of native species in our region. This monopolization can have substantial economic consequences, can impact rare and endangered species, and can dramatically alter long-established balances of both species' composition and habitat qualities.

The changes accompanying invasions are often subtle, sometimes even visually attractive, so that the ecological problem they pose is not always immediately obvious. Many of these invaders have become so well established across our landscape that eradication of any given species may be highly impractical unless a new invasion is detected early. But this does not mean that nothing is possible. There is increasing momentum at the local, regional, and national levels to forge a meaningful response to the problem of invasive plants[1].

To mount a successful strategy to combat invasive species a set of guidelines with clear steps needs to be recognized and adopted. The steps of this Plan incorporate:

- Prevention
- Control/Eradication
- Restoration

[1] Final Report: Strategic Recommendations for Managing Invasive Plants in Massachusetts Massachusetts Invasive Plant Advisory Group, February 28, 2005

Prevention – While this site is already invaded prevention may seem a moot point. That may seem true for the existing population, but this plan includes monitoring of the site to minimize future invasive species from establishing on the site. Early detection and rapid response are key components to minimize new invasions.

Control & Eradication – In this location control and eradication go hand in hand. To achieve eradication the plants must obviously be removed from the location. Controls are then used to ensure that there is no resurgence of the invader. Controls will include, removing all wood and debris from the removals, grinding the stumps of the trees that are accessible, using herbicidal materials on the stems of the shrubs and vines as well as the stumps of trees that are not accessible.

Restoration – To have a site that is unhospitable to invasive plants in the best way to prevent an invasion. To achieve this a healthy, native landscape the site will be replanted with native trees and shrubs.

The population of invasive plants on the site very from trees to vines and shrubs. Different species, and even relative size of a plant within the species will require different strategies to affectively treat them. The reproduction cycle and methods of propagation must be considered. The state, size and location are also a factor.

This Plan is affective because it targets the elements that have made an invasion possible on this location as well as customizing the treatment approaches for the particular plant. The predominant invasive species the heavily wooded areas are the Norway maples (*Acer platanoides*). There has been some research into the allelochemical effects of Norway maples, that is the excretion of chemicals by the maples that "poison" the soil and kill or make it difficult for other trees to grow. The subject is much debated in the arboricultural community and there is no scientific proof that soil is "poisoned" by Norway maples. I believe a more reasonable explanation why Norway maples replace native species are abiotic in nature. Norway maples have thick and dense canopies which create a parasol effect, heavily shading the understory and forest floor. They also have robust and relatively shallow root systems, capturing water and outcompeting other species. These characteristics of Norway maples cause the native species to be shaded out and suffer from lack of water, causing the native species to die off as well as limit germination of new plants, all the while new Norway maple seedlings continue to germinate and develop. The fact that this site was a Norway maple in the nursery only exacerbated the situation. The most effective way to control Norway maples is simply to remove the plants and debris and grind the stumps where

possible so they can't regrate and form coppices. Stumps not accessible or are under 4 inches, should be treated with a contact herbicide at the point of the cut. These steps, followed by annual monitoring and removing new seedlings as they are detected, will be an effective control.

Boxelder (*Acer negundo*) is also in the maple family and reproduces similarly to Norway maples, seeds dropped and spread by wind and wildlife. Using control methods similar to Norway maples is appropriate.

The next two predominant invasive trees on the site are Tree of Heaven (*Ailanthus altissima)* and black locust (*Robina pseudoacacia*). These species have very active rhizomes, continuously growing horizontal underground stems which puts out lateral shoots and adventitious. They tend to reproduce by sending up new growth in the form of root suckers. They are frequently, but not always, in more sunny, exposed locations, along roadways or in open fields, where they receive adequate sunlight to develop. At Arlington 360 some mature specimens can be found in full growth, forested areas, but the majority are smaller caliper plants, along the driveway. The mature trees of these species tend to be isolated and within denser Norway maple groves. There is limited root sucker developing from them because like native species, the new plants can't survive under a Norway maple canopy. The mature Trees of Heaven and black locust should utilize the same control methods used for the Norway maples.

The smaller Trees of Heaven and black locust, located in more open areas, act more like other invasive shrubs; Japanese knotweed (*Fallopia japonica*), wild rose (*Rosa multiflora*) and poison ivy (*Toxicodendron radicans*). These plants reproduce via rhizomes. The use of herbicide is more critical with these trees due to the reproducing through the root system. All the plants should be cut and removed from the site and the cuts be treated with contact herbicide. Multiple years of removing and treating may be required to achieve affective control.

Buckthorn acts a bit differently. The challenge for controlling common buckthorn (*Rhamnus cathartica*) is the way it reproduces. When a buckthorn drops seeds, they can stay in the soil for several years before germinating. This can lend an appearance of control only to find a resurgence several years later. Continued monitoring of locations with buckthorn is crucial and continued treatments of removing and treating with herbicide are necessary.

Restoration Planting

To reintroduce native species to the CR a restoration planting plan is included as part of this Plan. The Plan calls for the installation of 75 native trees and 25 native shrubs to be installed annually. Areas with steep grades will also be seeded with erosion reducing ground cover, such as a meadow mix. Like the removal schedule these are averages and the different Areas more appropriate and will receive more trees and shrubs and other areas less. The planting list is comprised of various trees including, oaks, maples, pines, birches, and elm. The native shrubs will include, serviceberry, winterberry, blueberry, Mt laurel, and others.

All trees will be 1.5-2" caliper and all shrubs will be 3 gal containers. The exact plant material used will be based on availability and may vary.

A project like this, where large populations of trees are being removed prior to replanting, deciding exact plant location is not practical. Plant placement should be field decided, once the invasives are removed. This approach also makes sense because the invasive removals will be scheduled in summer/fall months, with herbicide treatments immediately following. The plantings should take place the following spring, in preparation for a new growing season and when availability is at its peak.

That being said, once an Area has been cleared of invasive plants, a more accurate plan of plant location will be determined in conjunction with the installation plan of that Area.

Management Plan

Invasive Control

The goal of this Plan is to produce a document that will serve as the roadmap to removing and control invasive species in the Summer Street Woods CR while reclaiming the space with native species and allowing for passive recreational use by the public. Completion of this Plan will render the site in compliance with the CR.

The Plan is designed to take a five-year approach to managing the forest. Due to the distribution of plants, available access to the various locations on the site, along with the different physiological traits of the species, each year's segment of the Plan is customized and varies from year to year.

Below is a summary of yearly benchmarks. Specific yearly details can be found later in this report.

	Trees	Shrubs
Year	Count	Sq. Ft.
2023	187	3,098
2024	127	1,176
2025	108	473
2026	106	596
2027	137	5077
Total	665	10,438

In most cases the treatment of invasive shrubs, removed in previous years, will require additional monitoring and treatments in subsequent years.

Complete yearly invasive control specifications Can be found in Appendix C – Invasive Control Specification, pages 73 & 74.

Restoration

To ensure a successful planting campaign installation of new plants will be in the spring of for five consecutive years. Specific planting sites will be staked out by Consulting Arborist and landscape contractor based on field conditions. Consideration for planting locations will include leaving enough space to perform future invasive control in other Areas of the site.

Below is a summary of yearly benchmarks for new plantings, depending on final site review and availability.

	Trees	Shrubs
Year	**Count**	**Count**
2024	**55**	**30**
2025	**80**	**25**
2026	**75**	**20**
2027	**90**	**20**
2028	**75**	**30**
Total	**375**	**125**

Projected Plant List (based on availability)

Trees			**Shrubs**		
Common Name	**Latin Name**	**Count**	**Common Name**	**Latin Name**	**Count**
Red Oak	*Quercus rubra*	45	Shadblow Service Berry	*Amelanchier canadensis*	35
Swamp White Oak	*Quercus bicolor*	45	Winterberry	*Ilex verticillata*	35
White Oak	*Quercus alba*	45	Mt Laurel	*Kalmia latifolia*	15
Red Maple	*Acer rubra*	60	Lowbush Blueberry	*Vaccinium angustifolium*	20
Sugar Maple	*Acer saccharum*	60	Highbush Blueberry	*Vaccinium corymbosum*	20
White Pine	*Pinus strobus*	30			
River Birch	*Betula nigra*	30			
Jefferson Elm	*Ulmus americana*	30			
White Spruce	***P**icea glauca*	30			
	Total Tree Count	**375**		**Total Shrub Count**	**125**

During planting soil will be amended with the addition of loam with organic matter and bio-char. Starter fertilizer will also be applied at time of planting. Plants will be supported, where needed for a period of one year, then supports shall be removed. Contingent on natural weather conditions the new plantings will be watered once a week for the first full growing seasons after the installation. The new plantings will be monitored for a period of two years after installation to ensure establishment and to prescribe and treatments that may be necessary. Full planting specifications are located in Appendix D - Planting Specifications, pages 75 – 78.

Glossary of Terms

ASCA	American Society of Consulting Arborists, professional association of arborist specializing in arboricultural consulting
Branch Union	The structural union of a lateral branch to the tree stem.
Canopy	The part of the crown composed of leaves and small twigs.
Certified Arborist	A professional arborist possessing current certification issued by the Massachusetts Arborists Association (MAA) and/or the International Society of Arboriculture (ISA)
Clinometer	A device used to measure the height of an object
Co-dominant	Stems or branches, equal in size and relative importance usually associated with either the trunk/stems or scaffold limbs/ branches in the crown.
Crown	The upper part of a tree, measured from the lowest branch, including all the branches and foliage
DBH	Stands for Diameter Breast Height. The diameter of a tree measured at 4.5 feet above the ground.
Dripline	Perimeter of the area under a tree including the branches and leaves
Establishment	The process of a tree becoming acclimated to a new environment, usually correlating the new root development that can sustain normal biological functions of the tree
Included Bark	An inherent weak point where two or more stems grow independently pressing on one another
ISA	International Society of Arborists, a global, professional association of arborist
Level II Tree Risk Assessment	A visual assessment only. The tree is inspected from the ground only and diagnostic tools used
Level III Tree Risk Assessment	I more intensive inspection of the tree using diagnostic tool, such as a Resistograph and may also include inspection in the tree canopy
Parity	The time, usually in years, that it takes for a replacement tree to provide similar attributes and benefits of a removed tree
Pruning	Systematic removal of branches of a plant usually a woody perennial

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Appendix A – Maps

Full Site - Inclusive

Tree Collection Data

- Tree of Heaven
- Norway Maple
- Red Oak
- Black Cherry
- Black Locust
- Black Oak
- Boxelder
- White Oak
- Buckthorn
- Knottweed
- Poison Ivy
- Wild Rose
- Shagbark Hickory

Invasive Shrubs

- Knottweed
- Tree of Heaven
- Boxelder
- Buckthorn
- Poison Ivy
- Wild Rose

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Area 1 – Inclusive

Area 1 – Trees


Brattle St
Symmes Cir
Symmes Rd
Old Hospital Way
Woodside Ln
Vista Cir
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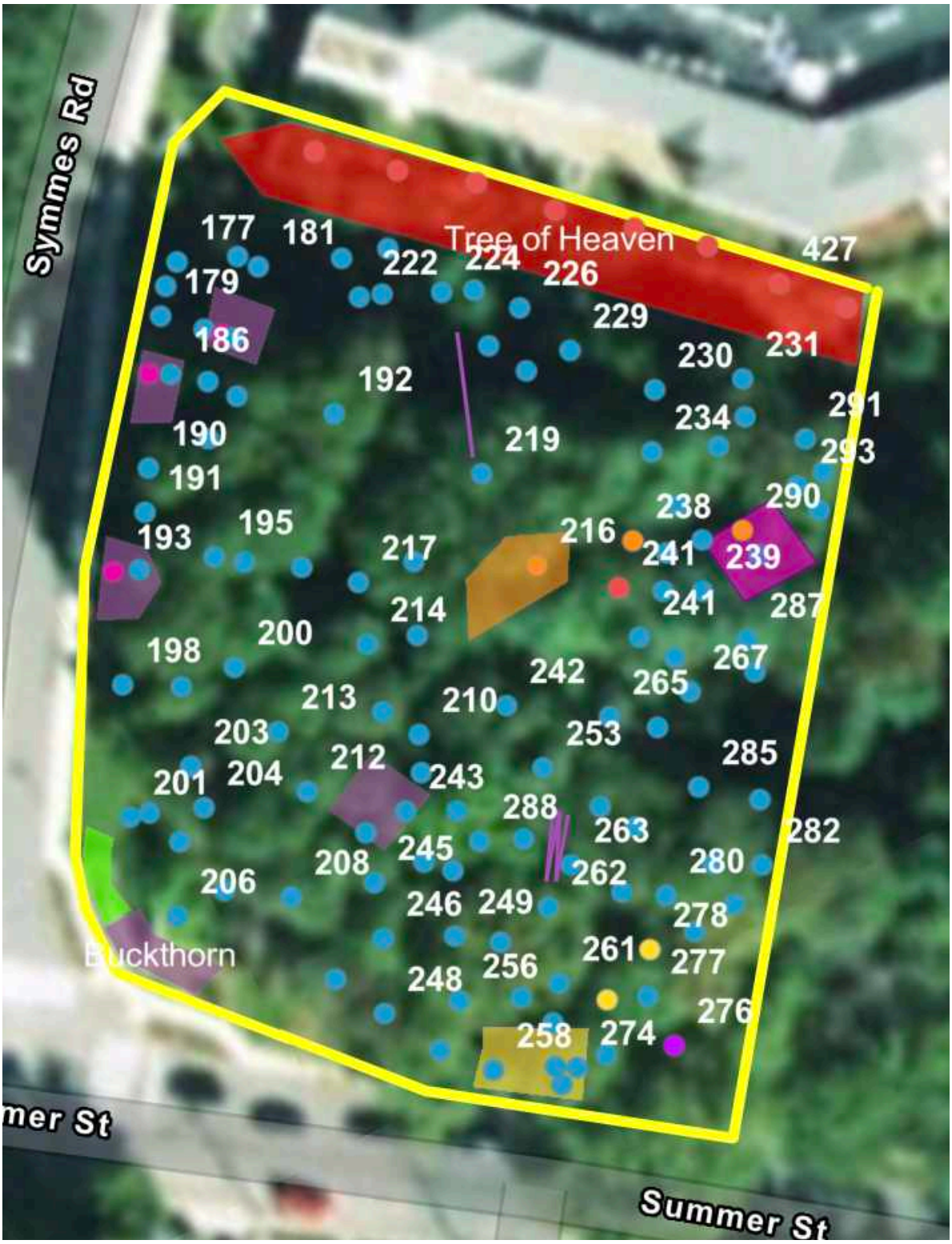
Area 1 – Shrubs

Area 2 – Inclusive



Area 2 – Trees


Symmes Rd
Symmes Rd
Summer St
Summer St
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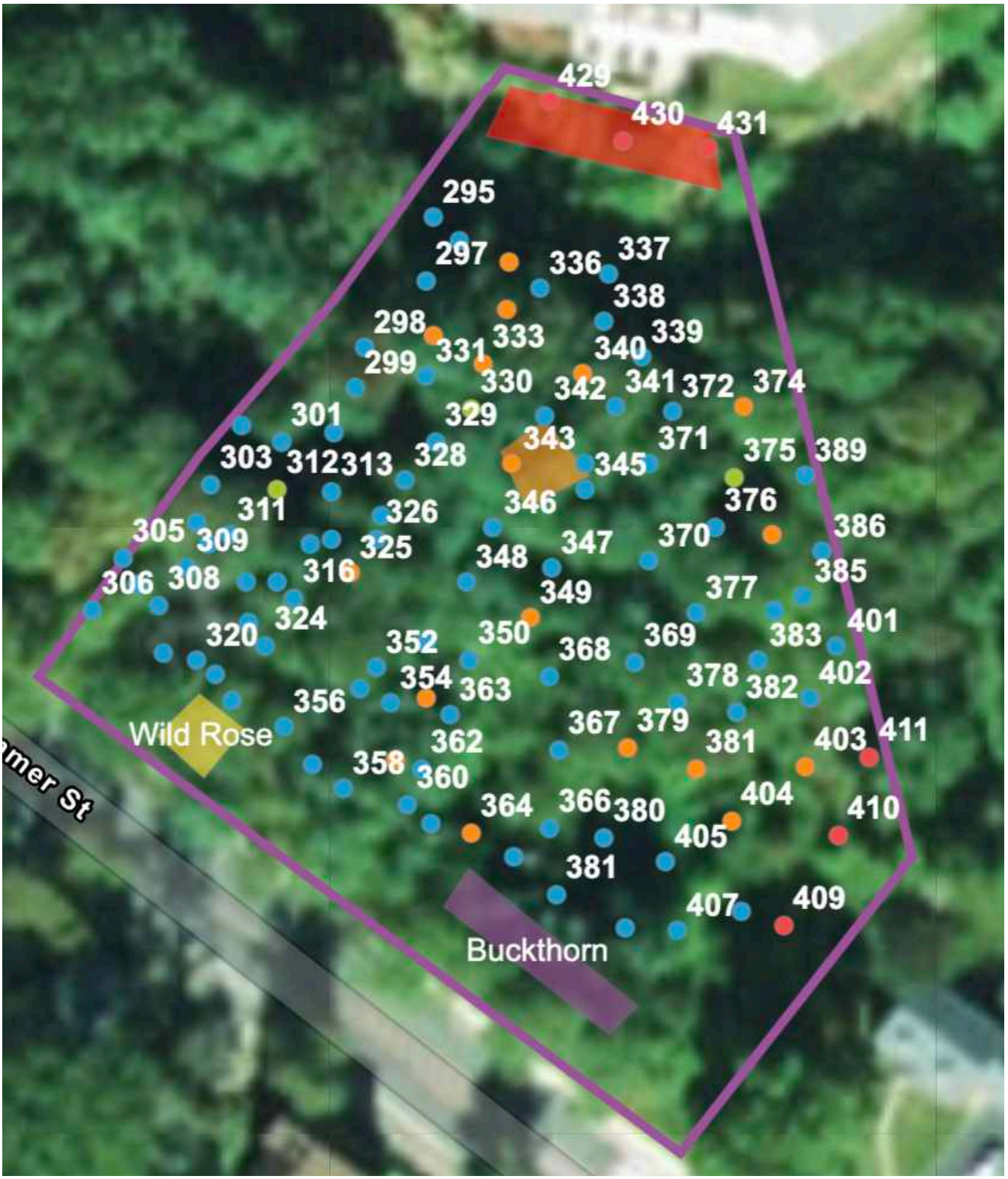
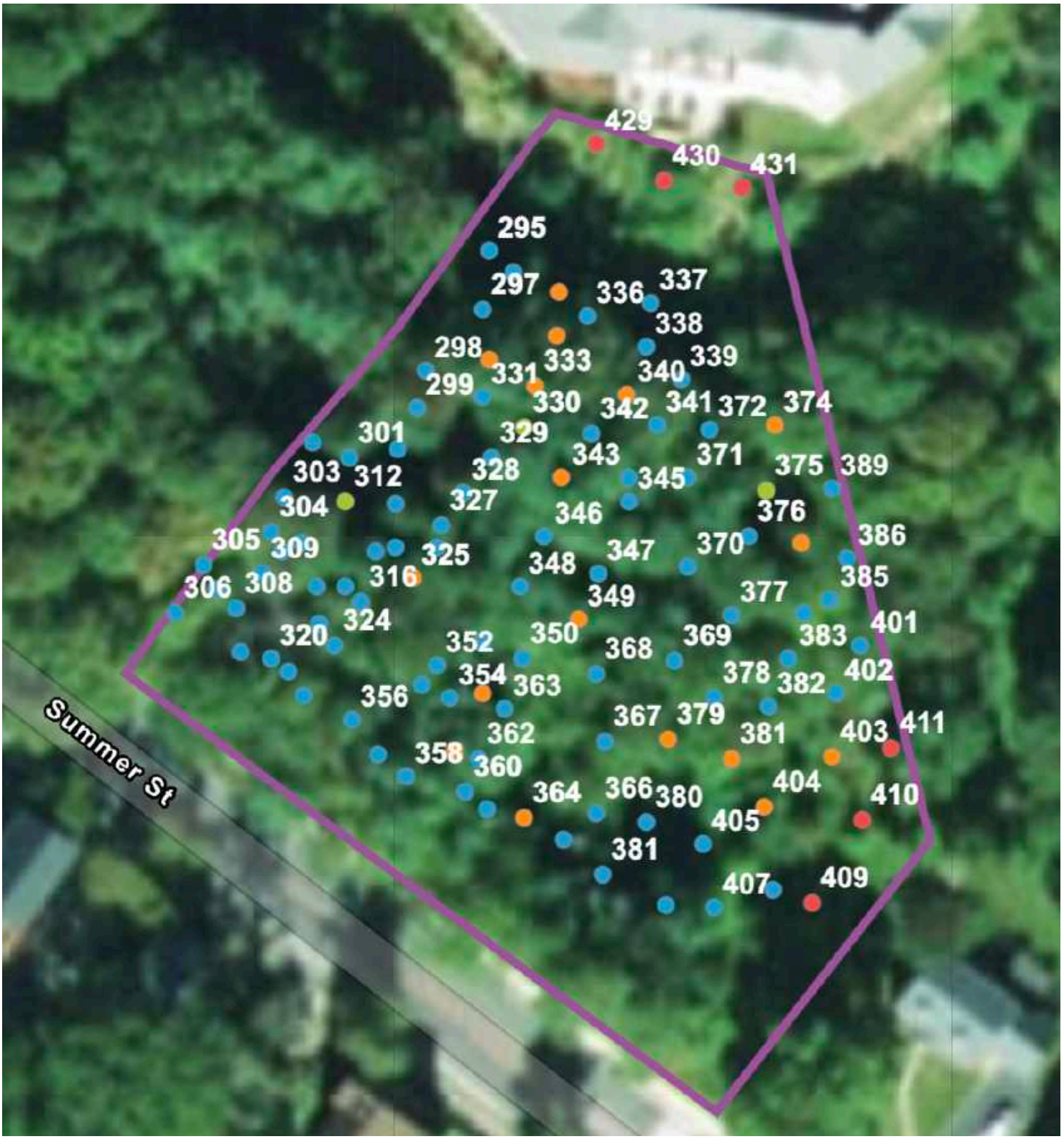
Area 2 – Shrubs

Area 3 – Inclusive



Area 3 – Trees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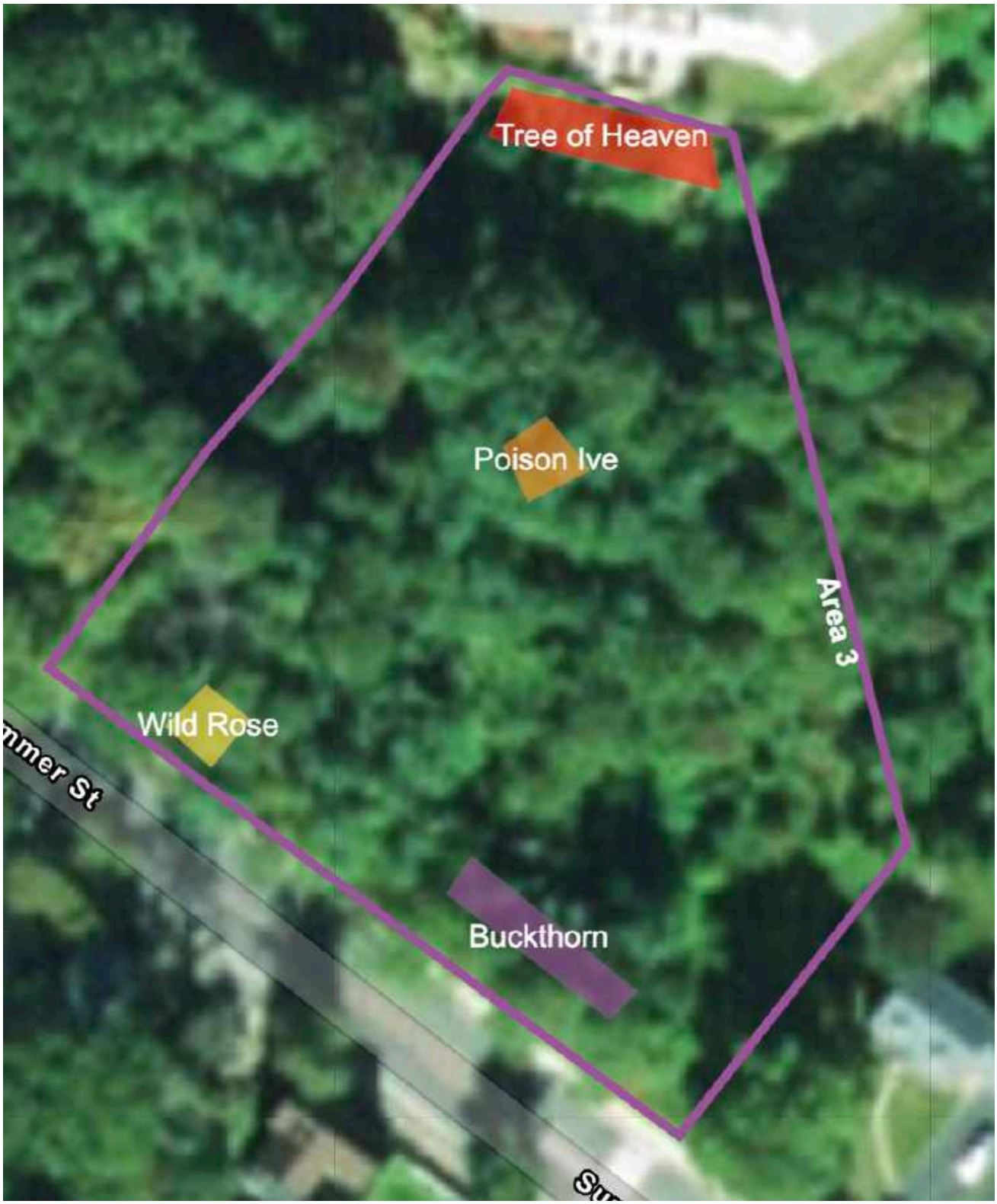
Area 3 – Shrubs



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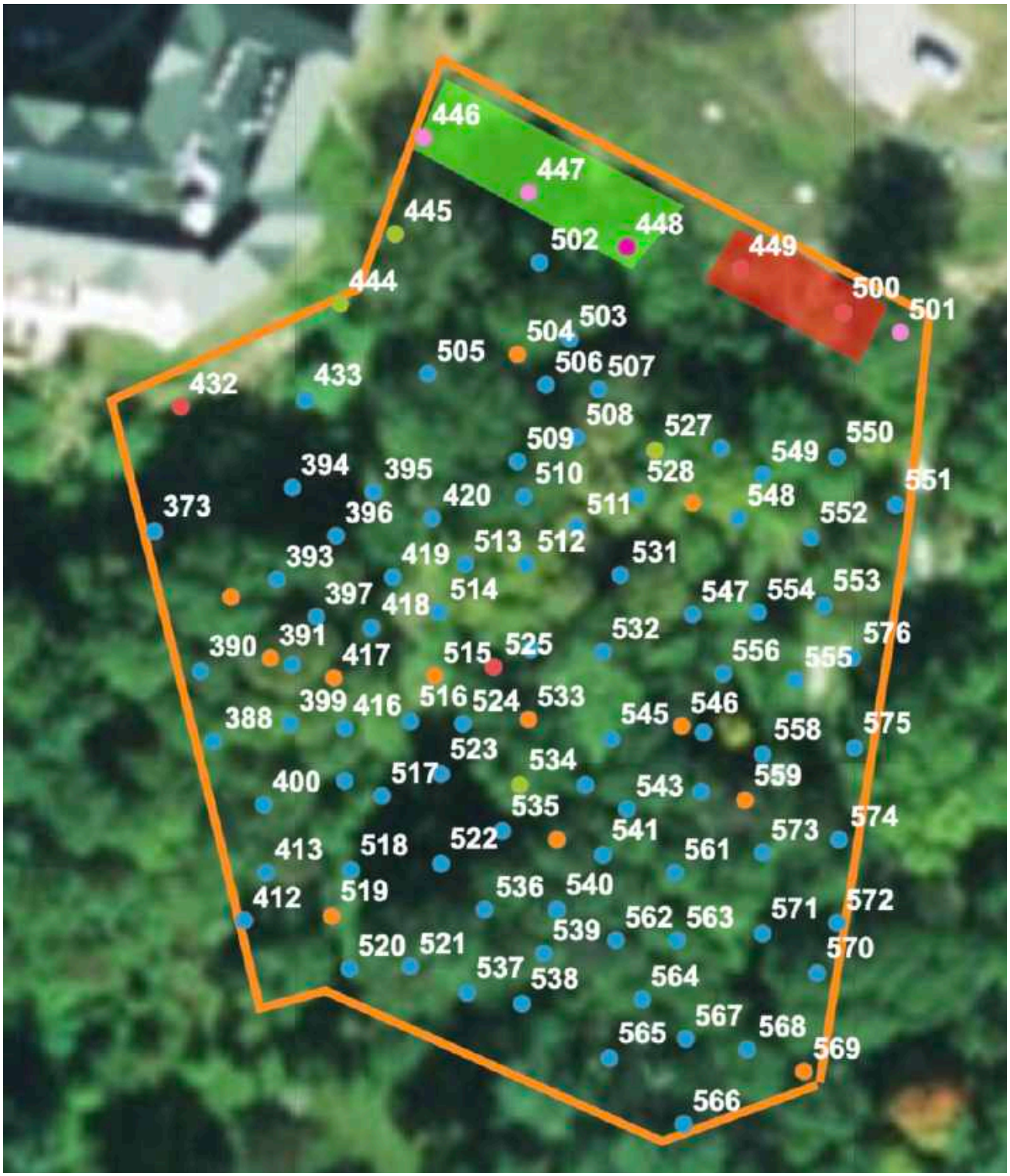
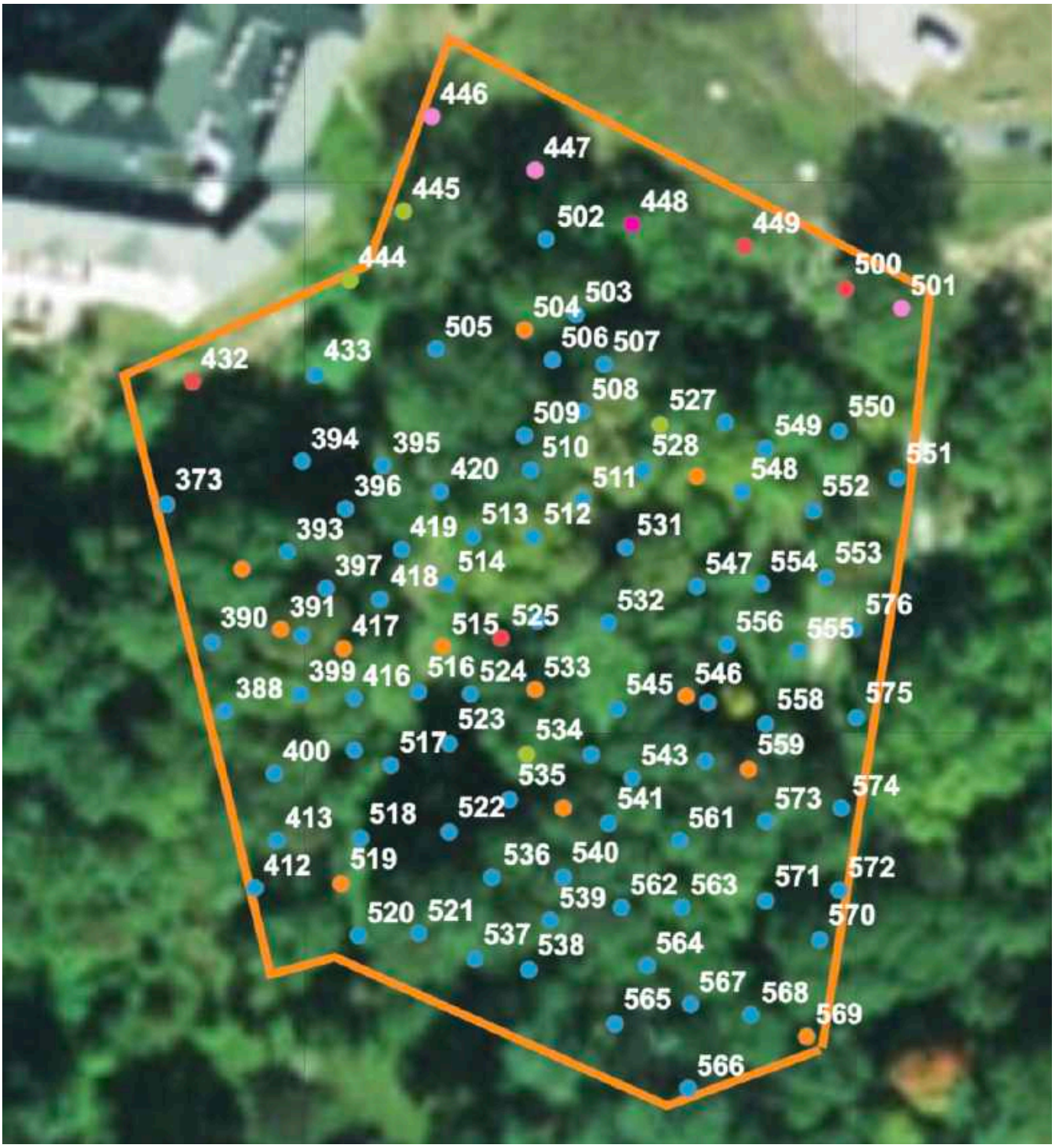
Area 4 – Inclusive



Area 4 – Trees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Area 4 – Shrubs

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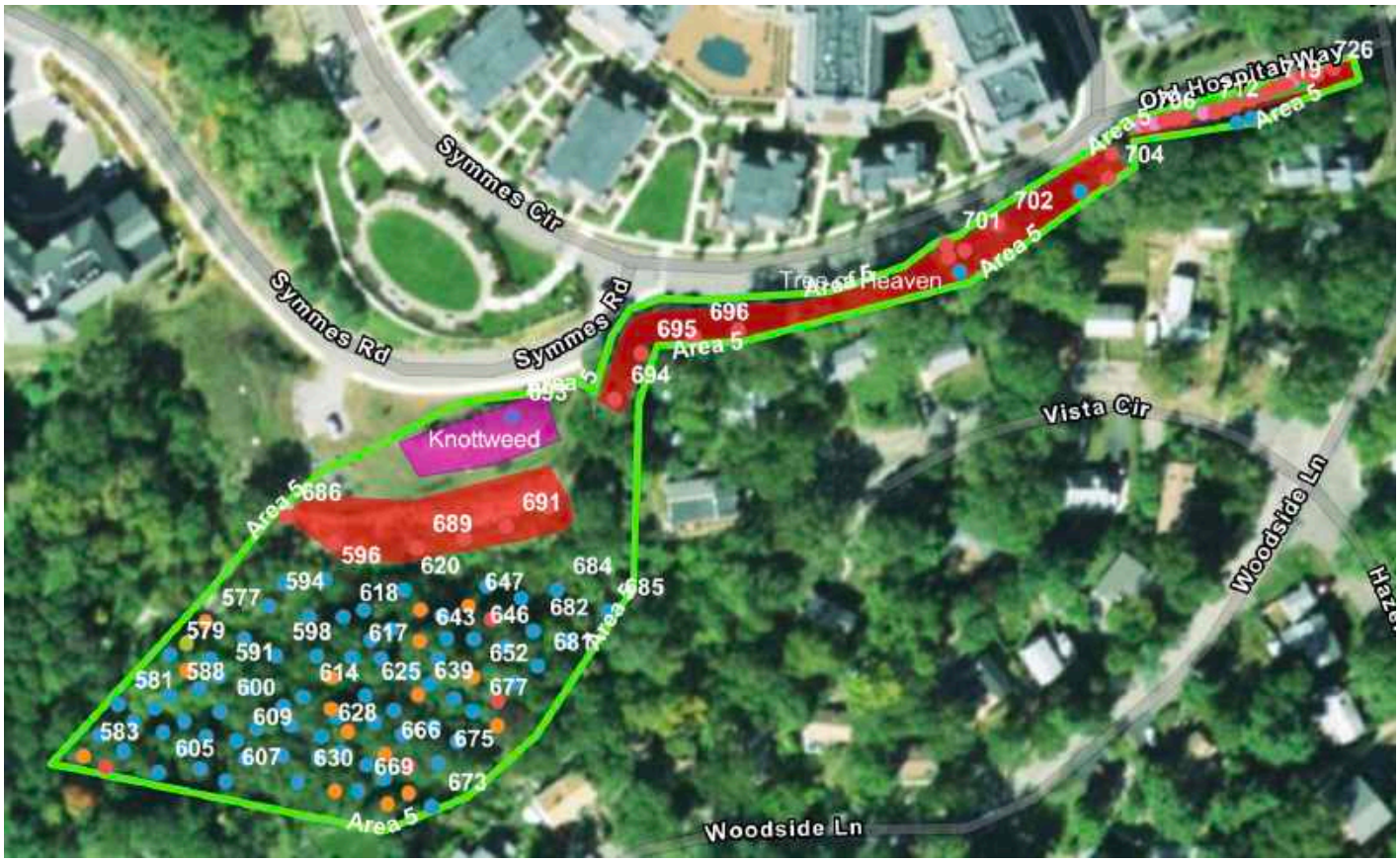
Area 5 – Inclusive



Area 5 – Trees


Symmes Cir
Symmes Rd
Symmes Rd
Old Hospital Way
Vista Cir
Woodside Ln
Woodside Ln
Area 5
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704
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701
696
695
694
693
686
689
691
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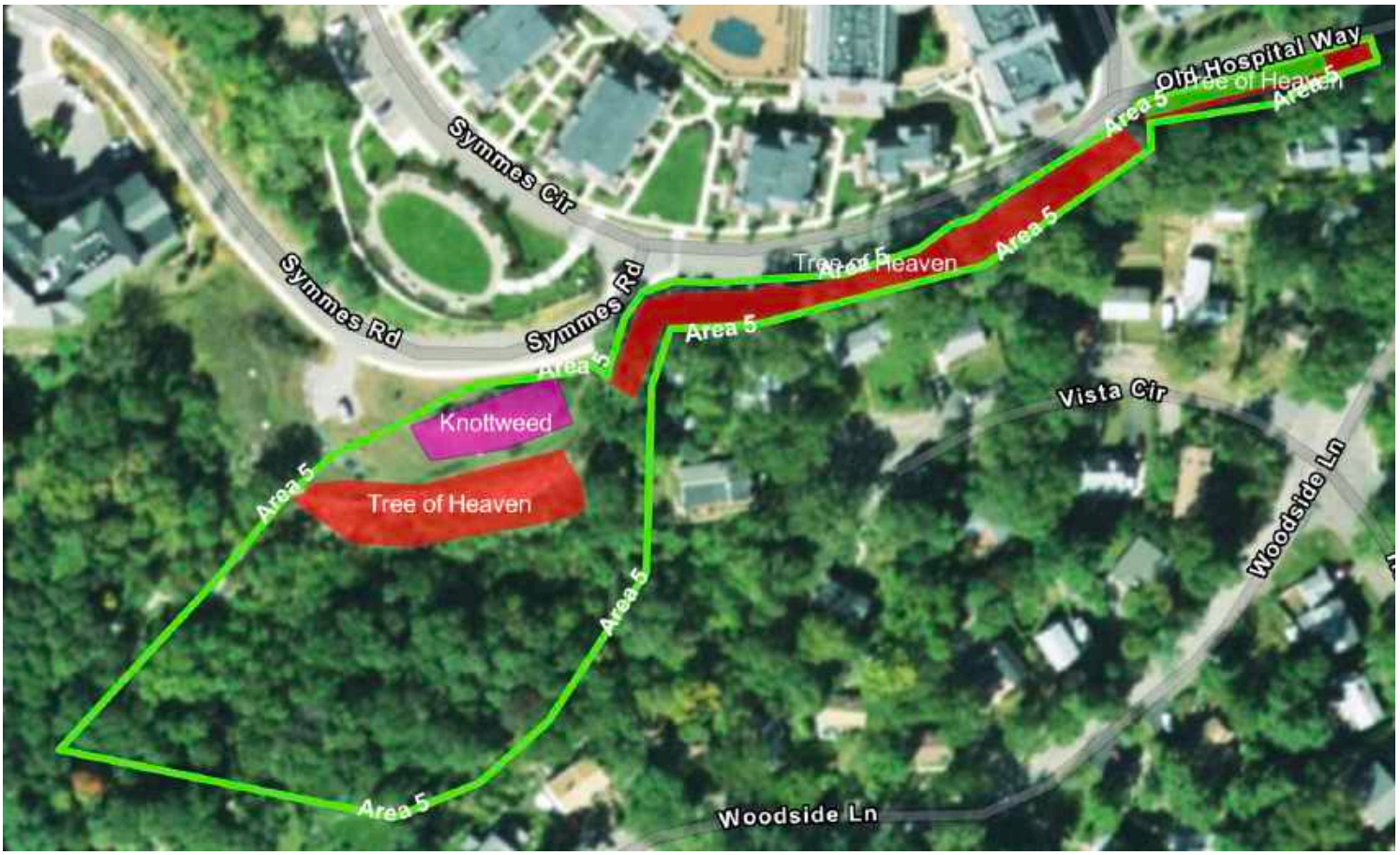
Area 5 – Shrubs



Appendix B –Inventory

Master Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
1	Tree of Heaven	Ailanthus altissima	18	Cluster of sapplings near driveway	1	42.42484566	-71.16019162
2	Tree of Heaven	Ailanthus altissima	15	Cluster on hillside	1	42.42492357	-71.16073851
3	Tree of Heaven	Ailanthus altissima	30	Cluster on hillside	1	42.42484303	-71.16084491
4	Tree of Heaven	Ailanthus altissima	20	Cluster on hillside	1	42.42491462	-71.16096197
5	Black Oak	Quercus velutina	10	Dead	1	42.42501893	-71.16081431
6	Black Oak	Quercus velutina	13	Dead	1	42.42513042	-71.16087632
7	Red Oak	Quercus rubra	16	Dying	1	42.42525299	-71.16101355
8	Tree of Heaven	Ailanthus altissima	26	Mature, remove?	1	42.42529952	-71.1611481
9	Norway Maple	Acer platanoides	10		1	42.42527324	-71.16176142
10	Black Cherry	Prunus serotina	7	Dead	1	42.42515385	-71.16189084
11	Black Cherry	Prunus serotina	9	Dead	1	42.42518267	-71.16195478
12	Norway Maple	Acer platanoides	5		1	42.42514781	-71.16194143
13	Norway Maple	Acer platanoides	5		1	42.42513953	-71.16198581
14	Red Oak	Quercus rubra	6	Dead - on fence	1	42.4251094	-71.16204576
15	Norway Maple	Acer platanoides	3		1	42.42503218	-71.16200498
16	White Oak	Quercus alba	13	Dead	1	42.42500771	-71.16209452
17	Norway Maple	Acer platanoides	5	Saplings around	1	42.42482615	-71.16215634
18	Norway Maple	Acer platanoides	5		1	42.42483244	-71.16221028
19	Norway Maple	Acer platanoides	3		1	42.42478359	-71.16225021
20	Norway Maple	Acer platanoides	5		1	42.42471841	-71.16229285
21	Tree of Heaven	Ailanthus altissima	10		1	42.4243958	-71.16271635
22	Tree of Heaven	Ailanthus altissima	10		1	42.42437938	-71.16275329
23	Tree of Heaven	Ailanthus altissima	10		1	42.42438142	-71.16273344
24	Norway Maple	Acer platanoides	10		1	42.42436564	-71.16271178
25	Tree of Heaven	Ailanthus altissima	10		1	42.42436893	-71.16267893
26	Tree of Heaven	Ailanthus altissima	9		1	42.4243465	-71.16269425
27	Tree of Heaven	Ailanthus altissima	12		1	42.4243036	-71.16272655
28	Tree of Heaven	Ailanthus altissima	11		1	42.42429974	-71.16274193
29	Tree of Heaven	Ailanthus altissima	8		1	42.42427851	-71.16273884
30	Tree of Heaven	Ailanthus altissima	10		1	42.42426774	-71.16276274
31	Tree of Heaven	Ailanthus altissima	9		1	42.42425213	-71.1627573
32	Norway Maple	Acer platanoides	4		1	42.42424185	-71.16281624
33	Norway Maple	Acer platanoides	5		1	42.42422937	-71.1627773
34	Tree of Heaven	Ailanthus altissima	12		1	42.42416802	-71.16275533
35	Tree of Heaven	Ailanthus altissima	12		1	42.42416952	-71.16282845
36	Norway Maple	Acer platanoides	8		1	42.42413379	-71.16273892
37	Tree of Heaven	Ailanthus altissima	13		1	42.42418151	-71.16289344
38	Tree of Heaven	Ailanthus altissima	11		1	42.42414005	-71.1628957
39	Tree of Heaven	Ailanthus altissima	12	Stump	1	42.42412232	-71.16281402
40	Boxelder	Acer negundo	24	Cluster of three	1	42.42409199	-71.16273465
41	White Oak	Quercus alba	18	Dead	1	42.42478249	-71.16213314
42	Tree of Heaven	Ailanthus altissima	14		1	42.42402317	-71.1627737
43	Norway Maple	Acer platanoides	8		1	42.42401581	-71.16290217
44	Norway Maple	Acer platanoides	6		1	42.42402015	-71.16291766
45	Norway Maple	Acer platanoides	8		1	42.42401404	-71.16298457
46	Tree of Heaven	Ailanthus altissima	10		1	42.42400268	-71.16283122
47	Tree of Heaven	Ailanthus altissima	15	Stump	1	42.42393795	-71.16271515
48	Tree of Heaven	Alianthus altisma	12		1	42.42393604	-71.16279222
49	Tree of Heaven	Alianthus altisma	10		1	42.42393703	-71.16287985
50	Tree of Heaven	Alianthus altisma	10		1	42.42394294	-71.16298395
51	Norway Maple	Acer platanoides	10		1	42.42386079	-71.16302617
52	Tree of Heaven	Alianthus altisma	11		1	42.42388945	-71.16289946
53	Tree of Heaven	Alianthus altisma	11		1	42.42387644	-71.16280187
54	Tree of Heaven	Alianthus altisma	12		1	42.42387903	-71.16269746
55	Norway Maple	Acer platanoides	20	5-Stem cluster	1	42.42389276	-71.16264281
56	Boxelder	Acer negundo	4		1	42.42384941	-71.16262116
57	Norway Maple	Acer platanoides	16		1	42.42381754	-71.16282508

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
58	Norway Maple	Acer platanoides	14		1	42.42381611	-71.16294318
59	Norway Maple	Acer platanoides	14		1	42.42379849	-71.1630519
60	Black Locust	Robinia pseudoacacia	13		1	42.42373158	-71.16304551
61	Norway Maple	Acer platanoides	7		1	42.42376722	-71.16296773
62	Norway Maple	Acer platanoides	7		1	42.42376661	-71.1628949
63	Norway Maple	Acer platanoides	7		1	42.42375777	-71.16280449
64	Tree of Heaven	Ailanthus altissima	26		1	42.42377316	-71.1626861
65	Black Locust	Robinia pseudoacacia	4		1	42.42380421	-71.16261186
66	Red Oak	Quercus rubra	30	Dead	1	42.42370812	-71.16296363
67	Tree of Heaven	Ailanthus altissima	2		1	42.42378206	-71.16259909
68	Tree of Heaven	Ailanthus altissima	2		1	42.42377548	-71.16259403
69	Tree of Heaven	Ailanthus altissima	2		1	42.42377717	-71.16261288
70	Tree of Heaven	Ailanthus altissima	2		1	42.42377162	-71.16260372
71	Tree of Heaven	Ailanthus altissima	2		1	42.42373792	-71.1625177
72	Tree of Heaven	Ailanthus altissima	2		1	42.42373309	-71.16250956
73	Tree of Heaven	Ailanthus altissima	2		1	42.42372866	-71.16249957
74	Tree of Heaven	Ailanthus altissima	2		1	42.42372388	-71.16248939
75	Tree of Heaven	Ailanthus altissima	2		1	42.42371928	-71.16247972
76	Tree of Heaven	Ailanthus altissima	4		1	42.42369785	-71.16266871
77	Boxelder	Acer negundo	5		1	42.42371577	-71.16263433
78	Boxelder	Acer negundo	4		1	42.42369952	-71.16260844
79	Tree of Heaven	Ailanthus altissima	2		1	42.42367117	-71.1625151
80	Tree of Heaven	Ailanthus altissima	2		1	42.42366948	-71.16250971
81	Tree of Heaven	Ailanthus altissima	2		1	42.42366566	-71.16251466
82	Tree of Heaven	Ailanthus altissima	2		1	42.42366499	-71.16250829
83	Tree of Heaven	Ailanthus altissima	2		1	42.42366108	-71.16251382
84	Tree of Heaven	Ailanthus altissima	6		1	42.42363768	-71.1626781
85	Tree of Heaven	Ailanthus altissima	3		1	42.42362533	-71.16265387
86	Norway Maple	Acer platanoides	8		1	42.42364843	-71.16242065
87	Tree of Heaven	Ailanthus altissima	6		1	42.42363586	-71.16236069
88	Tree of Heaven	Ailanthus altissima	14		1	42.42360297	-71.16246791
89	Tree of Heaven	Ailanthus altissima	13		1	42.42358911	-71.16241829
90	Tree of Heaven	Ailanthus altissima	12		1	42.42357822	-71.16237135
91	Tree of Heaven	Ailanthus altissima	10		1	42.42356931	-71.16233514
92	Black Locust	Robinia pseudoacacia	5		1	42.42355446	-71.16229357
93	Black Locust	Robinia pseudoacacia	7		1	42.42352675	-71.16230027
94	Black Locust	Robinia pseudoacacia	6		1	42.42349804	-71.16232039
95	Tree of Heaven	Ailanthus altissima	2		1	42.42348884	-71.16226535
96	Tree of Heaven	Ailanthus altissima	2		1	42.42348092	-71.16224657
97	Tree of Heaven	Ailanthus altissima	2		1	42.42346706	-71.16223048
98	Tree of Heaven	Ailanthus altissima	2		1	42.42347399	-71.16229753
99	Norway Maple	Acer platanoides	6		1	42.42346508	-71.1622868
100	Tree of Heaven	Ailanthus altissima	2		1	42.4234624	-71.16225328
101	Tree of Heaven	Ailanthus altissima	2		1	42.4234475	-71.16224389
102	Tree of Heaven	Ailanthus altissima	4		1	42.42336768	-71.16212607
103	Tree of Heaven	Ailanthus altissima	4		1	42.4233558	-71.16207779
104	Tree of Heaven	Ailanthus altissima	3		1	42.42333204	-71.16204024
105	Boxelder	Acer negundo	14		1	42.42331485	-71.1618714
106	Black Locust	Robinia pseudoacacia	4		1	42.42332084	-71.16176705
107	Tree of Heaven	Ailanthus altissima	2		1	42.42328515	-71.16179898
108	Black Locust	Robinia pseudoacacia	3		1	42.42327525	-71.16184726
109	Boxelder	Acer negundo	3		1	42.42328119	-71.16189286
110	Black Locust	Robinia pseudoacacia	12		1	42.42329307	-71.16194114
111	Tree of Heaven	Ailanthus altissima	3		1	42.4232767	-71.16201837
112	Tree of Heaven	Ailanthus altissima	5		1	42.42329662	-71.16201392
113	Tree of Heaven	Ailanthus altissima	5		1	42.42327922	-71.16204513
114	Black Locust	Robinia pseudoacacia	12		1	42.42330708	-71.1620462

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
115	Tree of Heaven	Ailanthus altissima	5		1	42.4232857	-71.16209105
116	Tree of Heaven	Ailanthus altissima	4		1	42.42329176	-71.16212064
117	Tree of Heaven	Ailanthus altissima	3		1	42.4233261	-71.16208316
118	Boxelder	Acer negundo	4		1	42.42333996	-71.16211266
119	Tree of Heaven	Ailanthus altissima	3		1	42.4233261	-71.16214485
120	Black Locust	Robinia pseudoacacia	12		1	42.42333996	-71.16217704
121	Tree of Heaven	Ailanthus altissima	3		1	42.42333402	-71.16227091
122	Tree of Heaven	Ailanthus altissima	3		1	42.42333996	-71.1623326
123	Wild Rose	Rosa multiflora	10	Cluster	1	42.42336174	-71.16231919
124	Boxelder	Acer negundo	5		1	42.42337758	-71.16226287
125	Norway Maple	Acer platanoides	15		1	42.42341718	-71.16231383
126	Wild Rose	Rosa multiflora	10	Cluster	1	42.4234091	-71.162451
127	Boxelder	Acer negundo	15		1	42.42346723	-71.16243362
128	Tree of Heaven	Ailanthus altissima	11		1	42.42353693	-71.16245544
129	Norway Maple	Acer platanoides	12		1	42.42351744	-71.16253351
130	Wild Rose	Rosa multiflora	10	Cluster	1	42.42348722	-71.16261337
131	Wild Rose	Rosa multiflora	10	Cluster	1	42.42352981	-71.16260825
132	White Oak	Quercus alba	18	Dead	1	42.42358097	-71.16263284
133	Tree of Heaven	Ailanthus altissima	2		1	42.42352296	-71.16272231
134	Tree of Heaven	Ailanthus altissima	3		1	42.42352916	-71.16277616
135	Tree of Heaven	Ailanthus altissima	3		1	42.42352322	-71.16281908
136	Tree of Heaven	Ailanthus altissima	3		1	42.42354104	-71.16285931
137	Tree of Heaven	Ailanthus altissima	3		1	42.4235252	-71.16291295
138	Norway Maple	Acer platanoides	5		1	42.42359161	-71.1627519
139	Norway Maple	Acer platanoides	4		1	42.42364012	-71.16276128
140	Norway Maple	Acer platanoides	7		1	42.4236025	-71.16283236
141	Norway Maple	Acer platanoides	5		1	42.42358666	-71.16289539
142	Norway Maple	Acer platanoides	6		1	42.42367278	-71.16290076
143	Norway Maple	Acer platanoides	7		1	42.42363517	-71.1629772
144	Norway Maple	Acer platanoides	4		1	42.42358171	-71.16297452
145	Poison Ivy	Toxicodendron radicans	10	Cluster	1	42.42348757	-71.16298339
146	Tree of Heaven	Ailanthus altissima	3		1	42.42349551	-71.16307561
147	Tree of Heaven	Ailanthus altissima	3		1	42.42348858	-71.16311316
148	Norway Maple	Acer platanoides	7		1	42.42353617	-71.16309656
149	Shagbark Hickory	Carya ovata	12	Dead	1	42.42358565	-71.1630681
150	Norway Maple	Acer platanoides	6		1	42.42363418	-71.16306035
151	Norway Maple	Acer platanoides	6		1	42.42367377	-71.16309254
152	Norway Maple	Acer platanoides	7		1	42.42374604	-71.1631502
153	Norway Maple	Acer platanoides	5		1	42.42370941	-71.16319312
154	Norway Maple	Acer platanoides	8		1	42.4236906	-71.16323201
155	Norway Maple	Acer platanoides	12		1	42.42364804	-71.16322799
156	Norway Maple	Acer platanoides	6		1	42.4235926	-71.163173
157	Norway Maple	Acer platanoides	6		1	42.42360545	-71.16327195
158	Norway Maple	Acer platanoides	5		1	42.4236025	-71.16335271
159	Norway Maple	Acer platanoides	4		1	42.42355894	-71.16323335
160	Norway Maple	Acer platanoides	7		1	42.42351142	-71.16320385
161	Tree of Heaven	Ailanthus altissima	3		1	42.42348165	-71.16320302
162	Norway Maple	Acer platanoides	4		1	42.4234718	-71.16332828
163	Norway Maple	Acer platanoides	4		1	42.42350845	-71.16330309
164	Norway Maple	Acer platanoides	8		1	42.42355201	-71.16334869
165	Norway Maple	Acer platanoides	5		1	42.42352724	-71.16337522
166	Norway Maple	Acer platanoides	11		1	42.42348766	-71.16338758
167	Norway Maple	Acer platanoides	7		1	42.42347477	-71.16345702
168	Norway Maple	Acer platanoides	11		1	42.42344111	-71.1634007
169	Norway Maple	Acer platanoides	8		1	42.42340542	-71.16345649
170	Norway Maple	Acer platanoides	8		1	42.42305997	-71.16392775
171	Norway Maple	Acer platanoides	8		1	42.42286296	-71.16412355

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172	Norway Maple	Acer platanoides	17		1	42.42284663	-71.16414903
173	Norway Maple	Acer platanoides	17		1	42.42281742	-71.16418457
174	Norway Maple	Acer platanoides	9		1	42.42279614	-71.16417049
175	Norway Maple	Acer platanoides	10		1	42.42277238	-71.16419664
176	Norway Maple	Acer platanoides	7		1	42.42276495	-71.16421341
177	Norway Maple	Acer platanoides	14		2	42.42308064	-71.16366586
178	Norway Maple	Acer platanoides	6		2	42.42306876	-71.16368732
179	Norway Maple	Acer platanoides	5		2	42.42304995	-71.16370743
180	Norway Maple	Acer platanoides	10		2	42.42306183	-71.16361087
181	Norway Maple	Acer platanoides	10		2	42.42304797	-71.16359612
182	Norway Maple	Acer platanoides	6		2	42.42301183	-71.16365312
183	Buckthorn	Rhamnus cathartica	10		2	42.42301728	-71.16366049
184	Norway Maple	Acer platanoides	10		2	42.42302619	-71.16367391
185	Buckthorn	Rhamnus cathartica	10		2	42.42301728	-71.16374364
186	Norway Maple	Acer platanoides	12		2	42.42300837	-71.16372487
187	Norway Maple	Acer platanoides	13		2	42.42299055	-71.16369536
188	Norway Maple	Acer platanoides	9		2	42.42297075	-71.16367793
189	Norway Maple	Acer platanoides	14		2	42.42295293	-71.16372219
190	Norway Maple	Acer platanoides	12		2	42.4229559	-71.16378991
191	Norway Maple	Acer platanoides	10		2	42.42292818	-71.16381539
192	Norway Maple	Acer platanoides	14		2	42.42292521	-71.1635988
193	Buckthorn	Rhamnus cathartica	6		2	42.42289918	-71.16387005
194	Norway Maple	Acer platanoides	16		2	42.42289155	-71.16384624
195	Norway Maple	Acer platanoides	12		2	42.42287373	-71.16377315
196	Norway Maple	Acer platanoides	5		2	42.42285987	-71.16374901
197	Norway Maple	Acer platanoides	8		2	42.42283611	-71.16370207
198	Norway Maple	Acer platanoides	12		2	42.42282225	-71.16391597
199	Norway Maple	Acer platanoides	9		2	42.42280146	-71.16386568
200	Norway Maple	Acer platanoides	5		2	42.42279454	-71.16380837
201	Norway Maple	Acer platanoides	12		2	42.42273315	-71.1639723
202	Norway Maple	Acer platanoides	12	Dead	2	42.42272919	-71.16395353
203	Norway Maple	Acer platanoides	13		2	42.42274602	-71.16389519
204	Norway Maple	Acer platanoides	12		2	42.42271335	-71.16390189
205	Norway Maple	Acer platanoides	14		2	42.42269949	-71.16393944
206	Norway Maple	Acer platanoides	12		2	42.42265296	-71.16397699
207	Norway Maple	Acer platanoides	8		2	42.42265296	-71.16392469
208	Norway Maple	Acer platanoides	14		2	42.42262425	-71.16386837
209	Norway Maple	Acer platanoides	12		2	42.42265989	-71.16369268
210	Norway Maple	Acer platanoides	9		2	42.42268563	-71.16367659
211	Norway Maple	Acer platanoides	10		2	42.42271434	-71.16369804
212	Norway Maple	Acer platanoides	6		2	42.4226886	-71.16380399
213	Norway Maple	Acer platanoides	11		2	42.42273711	-71.16379997
214	Norway Maple	Acer platanoides	12		2	42.42276384	-71.16367927
215	Norway Maple	Acer platanoides	8		2	42.42275196	-71.16363233
216	Black Locust	Robinia pseudoacacia	15		2	42.42275543	-71.16349286
217	Norway Maple	Acer platanoides	13		2	42.42280641	-71.16365915
218	Norway Maple	Acer platanoides	9		2	42.42280196	-71.1635988
219	Norway Maple	Acer platanoides	60	Multi-stem	2	42.42283413	-71.16349822
220	Norway Maple	Acer platanoides	4		2	42.4230247	-71.16351834
221	Norway Maple	Acer platanoides	4		2	42.42301579	-71.16347408
222	Norway Maple	Acer platanoides	4		2	42.42299401	-71.16352102
223	Norway Maple	Acer platanoides	4		2	42.42298807	-71.16349956
224	Norway Maple	Acer platanoides	5		2	42.42296827	-71.16344592
225	Norway Maple	Acer platanoides	5		2	42.42295738	-71.16341641
226	Norway Maple	Acer platanoides	10	Dead	2	42.42292967	-71.16338423
227	Norway Maple	Acer platanoides	5		2	42.4229168	-71.16342982
228	Norway Maple	Acer platanoides	7		2	42.42288611	-71.16340837

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229	Norway Maple	Acer platanoides	6		2	42.42288413	-71.16336009
230	Norway Maple	Acer platanoides	12		2		
231	Norway Maple	Acer platanoides	36	Triple-Stem	2	42.42280562	-71.16322194
232	Norway Maple	Acer platanoides	8		2	42.42277895	-71.16323898
233	Norway Maple	Acer platanoides	4		2	42.42277004	-71.16327653
234	Norway Maple	Acer platanoides	10		2	42.42278879	-71.16333728
235	Norway Maple	Acer platanoides	16		2	42.42274628	-71.16334091
236	Norway Maple	Acer platanoides	10		2	42.4227146	-71.1633342
237	Norway Maple	Acer platanoides	11		2	42.42271856	-71.16337309
238	Black Locust	Robinia pseudoacacia	16		2	42.42273737	-71.16339723
239	Norway Maple	Acer platanoides	6		2	42.42267995	-71.16335968
240	Norway Maple	Acer platanoides	6		2	42.4226948	-71.16339455
241	Tree of Heaven	Ailanthus altissima	14		2	42.42271259	-71.16343066
241	Norway Maple	Acer platanoides	10		2	42.422672	-71.16343737
242	Norway Maple	Acer platanoides	11		2	42.42267497	-71.16358623
243	Norway Maple	Acer platanoides	10		2	42.42264032	-71.16372704
244	Norway Maple	Acer platanoides	4		2	42.42264131	-71.16377264
245	Norway Maple	Acer platanoides	5		2	42.42260468	-71.16378739
246	Norway Maple	Acer platanoides	8		2	42.42256535	-71.16380533
247	Norway Maple	Acer platanoides	7		2	42.42255595	-71.16386702
248	Norway Maple	Acer platanoides	14		2	42.42251536	-71.1638402
249	Norway Maple	Acer platanoides	8		2	42.42254132	-71.16374314
250	Norway Maple	Acer platanoides	4		2	42.42258488	-71.16371229
251	Norway Maple	Acer platanoides	4		2	42.42260171	-71.16373509
252	Norway Maple	Acer platanoides	9		2	42.42262349	-71.16368011
253	Norway Maple	Acer platanoides	13		2	42.42262052	-71.16358489
254	Norway Maple	Acer platanoides	5		2	42.42258092	-71.16363585
255	Norway Maple	Acer platanoides	9		2	42.42252251	-71.16370425
256	Norway Maple	Acer platanoides	18		2	42.42249875	-71.16376996
257	Norway Maple	Acer platanoides	8		2	42.42247202	-71.16380885
258	Norway Maple	Acer platanoides	10		2	42.42244034	-71.16377264
259	Norway Maple	Acer platanoides	8		2	42.42247796	-71.16371229
260	Norway Maple	Acer platanoides	7		2	42.42245024	-71.16369754
261	Norway Maple	Acer platanoides	7		2	42.42247499	-71.16367206
262	Norway Maple	Acer platanoides	10		2	42.42252845	-71.16364658
263	Norway Maple	Acer platanoides	7		2	42.42254825	-71.16360501
264	Norway Maple	Acer platanoides	12		2	42.42257597	-71.16355136
265	Norway Maple	Acer platanoides	14		2	42.42263042	-71.16350174
266	Norway Maple	Acer platanoides	8		2	42.42264728	-71.16341601
267	Norway Maple	Acer platanoides	14		2	42.42261858	-71.16341735
268	Norway Maple	Acer platanoides	10		2	42.42260769	-71.16346295
269	Norway Maple	Acer platanoides	9		2	42.42255023	-71.1635299
270	Norway Maple	Acer platanoides	4		2	42.42251162	-71.16357416
271	Black Oak	Quercus velutina	50	Dead	2	42.42244727	-71.16363853
272	Norway Maple	Acer platanoides	9		2	42.42242054	-71.16371632
273	Norway Maple	Acer platanoides	4		2	42.42240668	-71.163719
274	Norway Maple	Acer platanoides	7		2	42.42241262	-71.16369754
275	Norway Maple	Acer platanoides	6		2	42.42241163	-71.16366535
276	Shagbark Hickory	Carya ovata	4	Dead	2	42.42239282	-71.16359964
277	Norway Maple	Acer platanoides	7		2	42.4224344	-71.16360098
278	Black Oak	Quercus velutina	30	Dead	2	42.4224641	-71.1635755
279	Norway Maple	Acer platanoides	16		2	42.42245968	-71.16352799
280	Norway Maple	Acer platanoides	10		2	42.42249479	-71.16353661
281	Norway Maple	Acer platanoides	4		2	42.42246463	-71.16347971
282	Norway Maple	Acer platanoides	4		2	42.42248047	-71.16343545
283	Norway Maple	Acer platanoides	12		2	42.4224973	-71.16347837
284	Norway Maple	Acer platanoides	7		2	42.42252304	-71.16340729

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285	Norway Maple	Acer platanoides	4		2	42.42255274	-71.16345557
286	Norway Maple	Acer platanoides	4		2	42.42260818	-71.16335097
287	Norway Maple	Acer platanoides	12		2	42.42263293	-71.16334158
288	Norway Maple	Acer platanoides	12		2	42.42259478	-71.16367474
289	Knotweed	Fallopia japonica	10		2	42.4226849	-71.16329129
290	Black Locust	Robinia pseudoacacia	15		2	42.42270668	-71.16329531
291	Norway Maple	Acer platanoides	4		2	42.42274331	-71.16319607
292	Norway Maple	Acer platanoides	5		2	42.42271559	-71.16319607
293	Norway Maple	Acer platanoides	6		2	42.42271658	-71.16322557
294	Norway Maple	Acer platanoides	4		2	42.42269183	-71.16321753
295	Norway Maple	Acer platanoides	6		3	42.42270048	-71.16313662
296	Norway Maple	Acer platanoides	6		3	42.42268068	-71.16310577
297	Norway Maple	Acer platanoides	14		3	42.42264801	-71.16314332
298	Norway Maple	Acer platanoides	9		3	42.42259158	-71.1632144
299	Norway Maple	Acer platanoides	4		3	42.42255792	-71.16322513
300	Norway Maple	Acer platanoides	9		3	42.4225203	-71.16324927
301	Norway Maple	Acer platanoides	10		3	42.42251337	-71.16330828
302	Norway Maple	Acer platanoides	6		3	42.42252601	-71.16335231
303	Norway Maple	Acer platanoides	4		3	42.4224775	-71.16338718
304	Norway Maple	Acer platanoides	4		3	42.42244582	-71.16340461
305	Norway Maple	Acer platanoides	5		3	42.42241612	-71.16348776
306	Norway Maple	Acer platanoides	11		3	42.42237256	-71.16352263
307	Norway Maple	Acer platanoides	8		3	42.42239434	-71.16347166
308	Norway Maple	Acer platanoides	8		3	42.42237652	-71.16344618
309	Norway Maple	Acer platanoides	7		3	42.4224082	-71.16341534
310	Norway Maple	Acer platanoides	12		3	42.42242701	-71.16338986
311	Norway Maple	Acer platanoides	4		3	42.42243493	-71.16336706
312	Red Oak	Quercus rubra	50	Dead	3	42.42247377	-71.1633123
313	Norway Maple	Acer platanoides	5		3	42.42247179	-71.16325061
314	Norway Maple	Acer platanoides	10		3	42.4224312	-71.16325195
315	Norway Maple	Acer platanoides	6		3	42.42242724	-71.16327475
316	Norway Maple	Acer platanoides	10		3	42.42238269	-71.16329487
317	Norway Maple	Acer platanoides	11		3	42.42239655	-71.16331364
318	Norway Maple	Acer platanoides	8		3	42.42239556	-71.16334851
319	Norway Maple	Acer platanoides	5		3	42.42233716	-71.16344105
320	Norway Maple	Acer platanoides	10		3	42.42233023	-71.1634035
321	Norway Maple	Acer platanoides	8		3	42.42231835	-71.16338338
322	Norway Maple	Acer platanoides	10		3	42.42229657	-71.16336326
323	Norway Maple	Acer platanoides	18		3	42.4223629	-71.16334583
324	Norway Maple	Acer platanoides	10		3	42.4223431	-71.16332571
325	Black Locust	Robinia pseudoacacia	12		3	42.42240348	-71.16322915
326	Norway Maple	Acer platanoides	4		3	42.42243219	-71.16319965
327	Norway Maple	Acer platanoides	12		3	42.42245199	-71.16319428
328	Norway Maple	Acer platanoides	6		3	42.4224807	-71.1631688
329	Norway Maple	Acer platanoides	8		3	42.42251337	-71.16313394
330	Red Oak	Quercus rubra	10	Dead	3	42.42254109	-71.1630937
331	Norway Maple	Acer platanoides	5		3	42.42256782	-71.16314466
332	Black Locust	Robinia pseudoacacia	12		3	42.42260247	-71.16313528
333	Black Locust	Robinia pseudoacacia	16		3	42.42257871	-71.16308029
334	Black Locust	Robinia pseudoacacia	11		3	42.42262326	-71.16305347
335	Black Locust	Robinia pseudoacacia	12		3	42.42266286	-71.16305079
336	Norway Maple	Acer platanoides	12		3	42.42264108	-71.16301592
337	Norway Maple	Acer platanoides	12		3	42.42265324	-71.1629362
338	Norway Maple	Acer platanoides	10		3	42.42261275	-71.16294229
339	Norway Maple	Acer platanoides	10		3	42.42258414	-71.16289887
340	Black Locust	Robinia pseudoacacia	12		3	42.42256988	-71.16296541
341	Norway Maple	Acer platanoides	9		3	42.42254157	-71.16292972

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
342	Norway Maple	Acer platanoides	10		3	42.42253501	-71.16300938
343	Black Locust	Robinia pseudoacacia	12		3	42.42249514	-71.1630459
344	Norway Maple	Acer platanoides	7		3	42.42247722	-71.16296459
345	Norway Maple	Acer platanoides	8	Dual-stem	3	42.42247327	-71.16296364
346	Norway Maple	Acer platanoides	7		3	42.42244146	-71.16306739
347	Norway Maple	Acer platanoides	8		3	42.42240696	-71.16300255
348	Norway Maple	Acer platanoides	7		3	42.42239607	-71.16309911
349	Black Locust	Robinia pseudoacacia	16		3	42.42236539	-71.16302534
350	Norway Maple	Acer platanoides	10		3	42.42233115	-71.16309573
351	Norway Maple	Acer platanoides	7		3	42.42234455	-71.16314288
352	Norway Maple	Acer platanoides	4		3	42.42232418	-71.16320023
353	Norway Maple	Acer platanoides	4		3	42.42230636	-71.16321767
354	Norway Maple	Acer platanoides	7		3	42.42229383	-71.16318444
355	Black Locust	Robinia pseudoacacia	6		3	42.42229855	-71.16314466
356	Norway Maple	Acer platanoides	14		3	42.42227479	-71.1633056
357	Norway Maple	Acer platanoides	8		3	42.42224311	-71.16327207
358	Norway Maple	Acer platanoides	5		3	42.42222331	-71.1632372
359	Black Locust	Robinia pseudoacacia	6		3	42.42224707	-71.16317953
360	Norway Maple	Acer platanoides	6		3	42.42221044	-71.16316612
361	Norway Maple	Acer platanoides	8		3	42.4221946	-71.1631393
362	Norway Maple	Acer platanoides	5		3	42.42224014	-71.16315003
363	Norway Maple	Acer platanoides	4		3	42.42228451	-71.16311737
364	Black Locust	Robinia pseudoacacia	12		3	42.42218668	-71.16309236
365	Norway Maple	Acer platanoides	8		3	42.42216589	-71.16304542
366	Norway Maple	Acer platanoides	4		3	42.42219064	-71.16300385
367	Norway Maple	Acer platanoides	5		3	42.4222561	-71.16299448
368	Norway Maple	Acer platanoides	7		3	42.42231711	-71.16300417
369	Norway Maple	Acer platanoides	8		3	42.42232935	-71.16290865
370	Norway Maple	Acer platanoides	7		3	42.42241278	-71.16289117
371	Norway Maple	Acer platanoides	6		3	42.42249406	-71.16289256
372	Norway Maple	Acer platanoides	6		3	42.42253861	-71.1628644
373	Norway Maple	Acer platanoides	10		4	42.42265215	-71.16273769
374	Black Locust	Robinia pseudoacacia	12		3	42.42254257	-71.16278527
375	Red Oak	Quercus rubra	24	Dead	3	42.42248379	-71.162796
376	Norway Maple	Acer platanoides	8		3	42.42244221	-71.16281746
377	Norway Maple	Acer platanoides	7		3	42.4223694	-71.16283694
378	Norway Maple	Acer platanoides	12		3	42.42229569	-71.16286037
379	Black Locust	Robinia pseudoacacia	12		3	42.42225808	-71.1629167
380	Norway Maple	Acer platanoides	7		3	42.42218272	-71.1629435
381	Norway Maple	Acer platanoides	8		3	42.4221352	-71.16299714
381	Black Locust	Robinia pseudoacacia	12		3	42.42224026	-71.16283892
382	Norway Maple	Acer platanoides	8		3	42.42228603	-71.16279218
383	Norway Maple	Acer platanoides	9		3	42.42233058	-71.16276669
384	Norway Maple	Acer platanoides	10		3	42.42237117	-71.16274926
385	Norway Maple	Acer platanoides	7		3	42.42238404	-71.16271573
386	Norway Maple	Acer platanoides	11		3	42.42242067	-71.16269428
387	Black Locust	Robinia pseudoacacia	12		3	42.42243453	-71.1627506
388	Norway Maple	Acer platanoides	4		4	42.42246126	-71.16266477
389	Norway Maple	Acer platanoides	6		3	42.42248402	-71.16271471
390	Norway Maple	Acer platanoides	12		4	42.42252537	-71.16268335
391	Black Locust	Robinia pseudoacacia	12		4	42.42253645	-71.16259625
392	Black Locust	Robinia pseudoacacia	12		4	42.42259233	-71.16264475
393	Norway Maple	Acer platanoides	8		4	42.42260773	-71.1625882
394	Norway Maple	Acer platanoides	7		4	42.42269116	-71.16257072
395	Norway Maple	Acer platanoides	8		4	42.42268649	-71.16246898
396	Norway Maple	Acer platanoides	7		4	42.42264778	-71.16251649
397	Norway Maple	Acer platanoides	12		4	42.42257407	-71.16253993

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
398	Norway Maple	Acer platanoides	12		4	42.42253095	-71.16256965
399	Norway Maple	Acer platanoides	6		4	42.42247749	-71.16257233
400	Norway Maple	Acer platanoides	8		4	42.42240423	-71.16260452
401	Norway Maple	Acer platanoides	8		3	42.42234246	-71.16267818
402	Norway Maple	Acer platanoides	10		3	42.4222989	-71.16270903
403	Black Locust	Robinia pseudoacacia	12		3	42.42224224	-71.16271553
404	Black Locust	Robinia pseudoacacia	10		3	42.4221967	-71.16279868
405	Norway Maple	Acer platanoides	10		3	42.42216193	-71.16287376
406	Norway Maple	Acer platanoides	12		3	42.42210649	-71.16291802
407	Norway Maple	Acer platanoides	4		3	42.42210451	-71.16285901
408	Norway Maple	Acer platanoides	12		3	42.42212035	-71.16278659
409	Tree of Heaven	Ailanthus altissima	4		3	42.42209681	-71.16269513
410	Tree of Heaven	Ailanthus altissima	6		3	42.42218482	-71.16267798
411	Tree of Heaven	Ailanthus altissima	5		3	42.42224979	-71.16264207
412	Norway Maple	Acer platanoides	4		4	42.42229929	-71.16262866
413	Norway Maple	Acer platanoides	4		4	42.42234285	-71.16260184
414	Norway Maple	Acer platanoides	7		4	42.42241579	-71.16246001
416	Norway Maple	Acer platanoides	10		4	42.42247359	-71.1625048
417	Black Locust	Robinia pseudoacacia	12		4	42.42251863	-71.16251847
418	Norway Maple	Acer platanoides	8		4	42.4225644	-71.16247173
419	Norway Maple	Acer platanoides	9		4	42.42260895	-71.16244625
420	Norway Maple	Acer platanoides	10		4	42.42266292	-71.16239658
421	Tree of Heaven	Ailanthus altissima	3		2	42.42310359	-71.16349187
422	Tree of Heaven	Ailanthus altissima	3		2	42.42306275	-71.16342824
423	Tree of Heaven	Ailanthus altissima	3		2	42.42302599	-71.16336462
424	Tree of Heaven	Ailanthus altissima	3		2	42.42298106	-71.16330653
425	Tree of Heaven	Ailanthus altissima	3		2	42.42294226	-71.16324567
426	Tree of Heaven	Ailanthus altissima	3		2	42.42290347	-71.16319034
427	Tree of Heaven	Ailanthus altissima	3		2	42.42285446	-71.16314331
428	Tree of Heaven	Ailanthus altissima	3		2	42.42281566	-71.16309629
429	Tree of Heaven	Ailanthus altissima	3		3	42.42279728	-71.163005
430	Tree of Heaven	Ailanthus altissima	3		3	42.42276461	-71.16292201
431	Tree of Heaven	Ailanthus altissima	3		3	42.42275848	-71.16282519
432	Tree of Heaven	Ailanthus altissima	3		4	42.42276461	-71.16270624
433	Norway Maple	Acer platanoides	7		4	42.4227546	-71.16237716
444	Red Oak	Quercus rubra	14	Dead	4	42.4228565	-71.16250983
445	Red Oak	Quercus rubra	16	Dead	4	42.4229198	-71.16244344
446	Boxelder	Acer negundo	6		4	42.42300773	-71.16240964
447	Boxelder	Acer negundo	6		4	42.42295866	-71.16228072
448	Buckthorn	Acer negundo	6		4	42.4229081	-71.16215986
449	Tree of Heaven	Ailanthus altissima	3		4	42.42288917	-71.1620202
500	Tree of Heaven	Ailanthus altissima	3		4	42.42285037	-71.16189295
501	Boxelder	Acer negundo	6		4	42.42283078	-71.16182346
502	Norway Maple	Acer platanoides	12		4	42.42289502	-71.1622652
503	Norway Maple	Acer platanoides	10		4	42.42282592	-71.16222788
504	Black Locust	Robinia pseudoacacia	12		4	42.42281166	-71.16229442
505	Norway Maple	Acer platanoides	10		4	42.42285453	-71.1622713
506	Norway Maple	Acer platanoides	9		4	42.42278335	-71.16225872
507	Norway Maple	Acer platanoides	6		4	42.42278039	-71.1621934
508	Norway Maple	Acer platanoides	6		4	42.42273584	-71.16222157
509	Norway Maple	Acer platanoides	8	Dual-stem	4	42.42271505	-71.16229264
510	Norway Maple	Acer platanoides	8		4	42.4226826	-71.16228407
511	Norway Maple	Acer platanoides	7		4	42.42265456	-71.16222017
512	Norway Maple	Acer platanoides	4		4	42.42262122	-71.16228139
513	Norway Maple	Acer platanoides	8		4	42.42262083	-71.16235773
514	Norway Maple	Acer platanoides	10		4	42.42257727	-71.16238858
515	Black Locust	Robinia pseudoacacia	12		4	42.42252061	-71.16239509

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
516	Norway Maple	Acer platanoides	9		4	42.42248014	-71.16242515
517	Norway Maple	Acer platanoides	8	Dual-stem	4	42.42241185	-71.16245907
518	Norway Maple	Acer platanoides	8		4	42.42234554	-71.16249797
519	Black Locust	Robinia pseudoacacia	16		4	42.42230396	-71.16252077
520	Norway Maple	Acer platanoides	7		4	42.42225569	-71.1624996
521	Norway Maple	Acer platanoides	5		4	42.42225779	-71.16242555
522	Norway Maple	Acer platanoides	7		4	42.42235136	-71.16238659
523	Norway Maple	Acer platanoides	6		4	42.42243264	-71.16238799
524	Norway Maple	Acer platanoides	6		4	42.42247719	-71.16235982
525	Tree of Heaven	Ailanthus altissima	5		4	42.42252817	-71.16232162
526	Norway Maple	Acer platanoides	4		4	42.42257767	-71.16230821
527	Red Oak	Quercus rubra	24	Dead	4	42.42272557	-71.16212501
528	Norway Maple	Acer platanoides	8		4	42.42268399	-71.16214646
529	Norway Maple	Acer platanoides	6		4	42.4227258	-71.16204371
530	Black Locust	Robinia pseudoacacia	12		4	42.42267631	-71.16207961
531	Norway Maple	Acer platanoides	7		4	42.42261118	-71.16216594
532	Norway Maple	Acer platanoides	10		4	42.42261295	-71.16207827
533	Black Locust	Robinia pseudoacacia	12		4	42.42248115	-71.1622807
534	Red Oak	Quercus rubra	24	Dead	4	42.42242237	-71.16229143
535	Norway Maple	Acer platanoides	8		4	42.42238079	-71.16231288
536	Norway Maple	Acer platanoides	7		4	42.42230798	-71.16233236
537	Norway Maple	Acer platanoides	12		4	42.42223427	-71.1623558
538	Norway Maple	Acer platanoides	8		4	42.4222246	-71.1622876
539	Norway Maple	Acer platanoides	9		4	42.42226915	-71.16226212
540	Norway Maple	Acer platanoides	10		4	42.42230974	-71.16224469
541	Norway Maple	Acer platanoides	11		4	42.42235924	-71.1621897
542	Black Locust	Robinia pseudoacacia	12		4	42.4223731	-71.16224603
543	Norway Maple	Acer platanoides	4		4	42.42239983	-71.1621602
544	Norway Maple	Acer platanoides	6		4	42.4224226	-71.16221013
545	Norway Maple	Acer platanoides	12		4	42.42246395	-71.16217877
546	Black Locust	Robinia pseudoacacia	12		4	42.42247502	-71.16209168
547	Norway Maple	Acer platanoides	7		4	42.42262582	-71.16204474
548	Norway Maple	Acer platanoides	11		4	42.42266245	-71.16202328
549	Norway Maple	Acer platanoides	4		4	42.42270304	-71.16199378
550	Norway Maple	Acer platanoides	6		4	42.42271927	-71.16190134
551	Norway Maple	Acer platanoides	7		4	42.42242716	-71.16170482
552	Norway Maple	Acer platanoides	8		4	42.42264601	-71.16193353
553	Norway Maple	Acer platanoides	9		4	42.4225847	-71.1619188
554	Norway Maple	Acer platanoides	10		4	42.42257814	-71.16199846
555	Norway Maple	Acer platanoides	8	Dual-stem	4	42.4225164	-71.16195272
556	Norway Maple	Acer platanoides	7		4	42.42252035	-71.16195367
557	Norway Maple	Acer platanoides	12		4	42.42246952	-71.16206508
558	Norway Maple	Acer platanoides	8		4	42.42245009	-71.16199163
559	Black Locust	Robinia pseudoacacia	16		4	42.42240851	-71.16201443
560	Norway Maple	Acer platanoides	6		4	42.42241607	-71.16206776
561	Norway Maple	Acer platanoides	8		4	42.42234281	-71.16209995
562	Norway Maple	Acer platanoides	8		4	42.42228103	-71.16217361
563	Norway Maple	Acer platanoides	4		4	42.42228143	-71.16209727
564	Norway Maple	Acer platanoides	10		4	42.42222702	-71.16214072
565	Norway Maple	Acer platanoides	8		4	42.42217514	-71.16218101
566	Norway Maple	Acer platanoides	10		4	42.42208203	-71.16209593
567	Norway Maple	Acer platanoides	4		4	42.42219212	-71.16208691
568	Norway Maple	Acer platanoides	12		4	42.42218199	-71.16201057
569	Black Locust	Robinia pseudoacacia	12		4	42.42216184	-71.16194308
570	Norway Maple	Acer platanoides	8		4	42.42225205	-71.16192643
571	Norway Maple	Acer platanoides	8		4	42.4222879	-71.16199217
572	Norway Maple	Acer platanoides	9		4	42.4222966	-71.16190095

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
573	Norway Maple	Acer platanoides	7		4	42.42236024	-71.16199325
574	Norway Maple	Acer platanoides	8		4	42.42237248	-71.16189774
575	Norway Maple	Acer platanoides	7		4	42.42245591	-71.16188025
576	Norway Maple	Acer platanoides	6		4	42.42253719	-71.16188164
577	Black Locust	Robinia pseudoacacia	12		5	42.4225857	-71.16177436
578	Red Oak	Quercus rubra	24	Dead	5	42.42252692	-71.16178508
579	Norway Maple	Acer platanoides	8		5	42.42248534	-71.16180654
580	Norway Maple	Acer platanoides	7		5	42.42241253	-71.16182602
581	Norway Maple	Acer platanoides	12		5	42.42233882	-71.16184946
582	Norway Maple	Acer platanoides	10		5	42.42226492	-71.16184329
583	Black Locust	Robinia pseudoacacia	12		5	42.42220826	-71.16184979
584	Tree of Heaven	Ailanthus altissima	5		5	42.42221581	-71.16177633
585	Norway Maple	Acer platanoides	4		5	42.42226531	-71.16176292
586	Norway Maple	Acer platanoides	8		5	42.42232916	-71.16178126
587	Norway Maple	Acer platanoides	9		5	42.42237371	-71.16175578
588	Norway Maple	Acer platanoides	10		5	42.42241429	-71.16173834
589	Norway Maple	Acer platanoides	11		5	42.42246379	-71.16168336
590	Black Locust	Robinia pseudoacacia	12		5	42.42247765	-71.16173969
591	Norway Maple	Acer platanoides	4		5	42.42250438	-71.16165385
592	Norway Maple	Acer platanoides	6		5	42.42252715	-71.16170379
593	Norway Maple	Acer platanoides	12		5	42.4225685	-71.16167243
594	Norway Maple	Acer platanoides	7		5	42.42268763	-71.16164916
595	Norway Maple	Acer platanoides	4		5	42.42274518	-71.16165145
596	Norway Maple	Acer platanoides	6		5	42.42279768	-71.16156038
597	Norway Maple	Acer platanoides	6		5	42.42271635	-71.16153834
598	Norway Maple	Acer platanoides	12		5	42.42257408	-71.16155874
599	Norway Maple	Acer platanoides	6		5	42.42252062	-71.16156142
600	Norway Maple	Acer platanoides	8		5	42.42244736	-71.1615936
601	Norway Maple	Acer platanoides	8		5	42.42238559	-71.16166727
602	Norway Maple	Acer platanoides	10		5	42.42234203	-71.16169811
603	Norway Maple	Acer platanoides	4		5	42.42238598	-71.16159092
604	Norway Maple	Acer platanoides	4		5	42.42234242	-71.16161774
605	Norway Maple	Acer platanoides	8		5	42.42222749	-71.16163834
606	Norway Maple	Acer platanoides	6		5	42.42232417	-71.16155131
607	Norway Maple	Acer platanoides	4		5	42.42233203	-71.16147371
608	Norway Maple	Acer platanoides	4		5	42.4223933	-71.16146265
609	Norway Maple	Acer platanoides	6		5	42.42241606	-71.16151258
610	Norway Maple	Acer platanoides	6		5	42.42244351	-71.16138334
611	Norway Maple	Acer platanoides	12		5	42.42245741	-71.16148122
612	Norway Maple	Acer platanoides	4		5	42.42250569	-71.16140776
613	Norway Maple	Acer platanoides	6		5	42.42252846	-71.1614577
614	Norway Maple	Acer platanoides	12		5	42.42256981	-71.16142634
615	Black Locust	Robinia pseudoacacia	12		5	42.42263676	-71.16138775
616	Norway Maple	Acer platanoides	10		5	42.42265495	-71.16145853
617	Norway Maple	Acer platanoides	8		5	42.42269529	-71.16137192
618	Norway Maple	Acer platanoides	12		5	42.42275408	-71.16145467
619	Norway Maple	Acer platanoides	6		5	42.42279115	-71.16141801
620	Norway Maple	Acer platanoides	10		5	42.42287534	-71.161354
621	Black Locust	Robinia pseudoacacia	12		5	42.42285716	-71.16128322
622	Norway Maple	Acer platanoides	12		5	42.4227902	-71.16132181
623	Norway Maple	Acer platanoides	6		5	42.42274885	-71.16135317
624	Norway Maple	Acer platanoides	4		5	42.42272608	-71.16130323
625	Norway Maple	Acer platanoides	8		5	42.42264468	-71.16128046
626	Black Locust	Robinia pseudoacacia	12		5	42.42258088	-71.16133924
627	Norway Maple	Acer platanoides	12		5	42.42257538	-71.16131264
628	Norway Maple	Acer platanoides	6		5	42.42252193	-71.16131533
629	Norway Maple	Acer platanoides	12		5	42.42248486	-71.16135198

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
630	Norway Maple	Acer platanoides	4		5	42.42241666	-71.16130021
631	Norway Maple	Acer platanoides	10		5	42.42251802	-71.1612478
632	Black Locust	Robinia pseudoacacia	12		5	42.42256306	-71.16126146
633	Norway Maple	Acer platanoides	8		5	42.42260884	-71.16121472
634	Norway Maple	Acer platanoides	9		5	42.42265338	-71.16118924
639	Black Locust	Robinia pseudoacacia	12		5	42.42278346	-71.16115693
640	Norway Maple	Acer platanoides	10		5	42.42273841	-71.16114327
641	Norway Maple	Acer platanoides	6		5	42.42274232	-71.1612108
642	Norway Maple	Acer platanoides	12		5	42.42279578	-71.16120811
643	Black Locust	Robinia pseudoacacia	12		5	42.42280128	-71.16123471
644	Norway Maple	Acer platanoides	12		5	42.4228389	-71.16117839
645	Norway Maple	Acer platanoides	8		5	42.42287256	-71.16122667
646	Norway Maple	Acer platanoides	6		5	42.42287663	-71.16113992
647	Black Locust	Robinia pseudoacacia	12		5	42.42292005	-71.16117518
648	Tree of Heaven	Ailanthus altissima	5		5	42.42292761	-71.16110172
649	Norway Maple	Acer platanoides	10		5	42.42297671	-71.16116868
650	Norway Maple	Acer platanoides	4		5	42.4229771	-71.16108831
651	Norway Maple	Acer platanoides	8		5	42.42282923	-71.16111019
652	Black Locust	Robinia pseudoacacia	12		5	42.42278544	-71.16103355
653	Norway Maple	Acer platanoides	9		5	42.42274497	-71.16106361
654	Norway Maple	Acer platanoides	10		5	42.42267071	-71.16107071
655	Norway Maple	Acer platanoides	10		5	42.42262171	-71.16113157
666	Black Locust	Robinia pseudoacacia	12		5	42.42256504	-71.16113808
667	Norway Maple	Acer platanoides	9		5	42.42252458	-71.16116814
668	Black Locust	Robinia pseudoacacia	12		5	42.42244358	-71.16120148
669	Norway Maple	Acer platanoides	12		5	42.42247083	-71.16114445
670	Black Locust	Robinia pseudoacacia	12		5	42.42248334	-71.16105432
671	Norway Maple	Acer platanoides	6		5	42.42252162	-71.16110282
672	Black Locust	Robinia pseudoacacia	12		5	42.42252558	-71.16102369
673	Norway Maple	Acer platanoides	7		5	42.42253007	-71.1609492
674	Tree of Heaven	Ailanthus altissima	5		5	42.4225726	-71.16106462
675	Norway Maple	Acer platanoides	4		5	42.42261318	-71.16099883
676	Norway Maple	Acer platanoides	4		5	42.42267111	-71.16099035
677	Norway Maple	Acer platanoides	6		5	42.42274201	-71.16099828
678	Black Locust	Robinia pseudoacacia	12		5	42.42274597	-71.16091916
679	Tree of Heaven	Ailanthus altissima	5		5	42.42279299	-71.16096008
680	Norway Maple	Acer platanoides	4		5	42.42284249	-71.16094667
681	Norway Maple	Acer platanoides	12		5	42.42289949	-71.16091821
682	Norway Maple	Acer platanoides	9		5	42.42291691	-71.16099796
683	Norway Maple	Acer platanoides	8		5	42.42296963	-71.16093869
684	Norway Maple	Acer platanoides	10		5	42.4228421	-71.16102704
685	Norway Maple	Acer platanoides	6		5	42.42307575	-71.16084181
686	Tree of Heaven	Ailanthus altissima	4		5	42.42286263	-71.1617491
687	Tree of Heaven	Ailanthus altissima	4		5	42.42287488	-71.16159695
688	Tree of Heaven	Ailanthus altissima	4		5	42.42289938	-71.16148353
689	Tree of Heaven	Ailanthus altissima	5		5	42.42296064	-71.16139225
690	Tree of Heaven	Ailanthus altissima	4		5	42.42303416	-71.16129543
691	Tree of Heaven	Ailanthus altissima	4		5	42.42310359	-71.16121797
692	Tree of Heaven	Ailanthus altissima	3		5	42.42318731	-71.16114605
693	Knotweed	Fallopia japonica	10		5	42.4233006	-71.1613745
694	Tree of Heaven	Ailanthus altissima	7		5	42.42345085	-71.16116308
695	Tree of Heaven	Ailanthus altissima	7		5	42.42356173	-71.1611309
696	Tree of Heaven	Ailanthus altissima	7		5	42.42365479	-71.16107725
697	Tree of Heaven	Ailanthus altissima	8		5	42.42367063	-71.16096996
698	Norway Maple	Acer platanoides	24		5	42.4240785	-71.16054886
699	Tree of Heaven	Ailanthus altissima	10		5	42.42409037	-71.16059982
700	Tree of Heaven	Ailanthus altissima	11		5	42.42412007	-71.160573

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
701	Tree of Heaven	Ailanthus altissima	12		5	42.42410819	-71.16062396
702	Tree of Heaven	Ailanthus altissima	10		5	42.42420521	-71.16053545
703	Norway Maple	Acer platanoides	16		5	42.42435766	-71.16039329
704	Tree of Heaven	Ailanthus altissima	20		5	42.42441508	-71.16034769
705	Tree of Heaven	Ailanthus altissima	30		5	42.42446062	-71.1603772
706	Boxelder	Acer negundo	4		5	42.42454625	-71.16035909
707	Tree of Heaven	Ailanthus altissima	4		5	42.42455318	-71.16034099
708	Boxelder	Acer negundo	4		5	42.42456605	-71.1603269
709	Tree of Heaven	Ailanthus altissima	4		5	42.42458189	-71.1603088
710	Tree of Heaven	Ailanthus altissima	4		5	42.42459555	-71.16028641
711	Tree of Heaven	Ailanthus altissima	4		5	42.4246099	-71.16026496
712	Boxelder	Acer negundo	4		5	42.42463861	-71.16022606
713	Tree of Heaven	Ailanthus altissima	3		5	42.42465445	-71.16020192
714	Tree of Heaven	Ailanthus altissima	3		5	42.42467573	-71.16017913
715	Tree of Heaven	Ailanthus altissima	3		5	42.42469306	-71.16016571
716	Norway Maple	Acer platanoides	5		5	42.42466534	-71.16013353
717	Norway Maple	Acer platanoides	5		5	42.42468761	-71.16010738
718	Tree of Heaven	Ailanthus altissima	4		5	42.42471781	-71.16013487
719	Tree of Heaven	Ailanthus altissima	3	Cluster	5	42.42474849	-71.16011207
720	Tree of Heaven	Ailanthus altissima	3		5	42.42476829	-71.16009732
721	Tree of Heaven	Ailanthus altissima	3		5	42.42478611	-71.16008122
722	Tree of Heaven	Ailanthus altissima	3		5	42.42478611	-71.16007452
723	Boxelder	Acer negundo	6		5	42.42480294	-71.16006513
724	Tree of Heaven	Ailanthus altissima	3		5	42.42482076	-71.1600544
725	Tree of Heaven	Ailanthus altissima	3		5	42.42483165	-71.16003294
726	Tree of Heaven	Ailanthus altissima	5		5	42.42484353	-71.16001953
727	Tree of Heaven	Ailanthus altissima	3		5	42.42487026	-71.15999137
728	Norway Maple	Acer platanoides	8	Dead	1	42.42491605	-71.16009082
729	Norway Maple	Acer platanoides	6		1	42.42494377	-71.16005059
730	Norway Maple	Acer platanoides	3		1	42.42498139	-71.16002779
731	Norway Maple	Acer platanoides	4		1	42.42501405	-71.16002243
732	Norway Maple	Acer platanoides	4		1	42.42499129	-71.16009082
733	Norway Maple	Acer platanoides	3		1	42.42498035	-71.16011568
734	Norway Maple	Acer platanoides	3		1	42.42498634	-71.16013106
735	Norway Maple	Acer platanoides	6		1	42.42501603	-71.16012972
736	Norway Maple	Acer platanoides	4		1	42.42499178	-71.16018135
737	Tree of Heaven	Ailanthus altissima	7		1	42.42521402	-71.16087872
738	Tree of Heaven	Ailanthus altissima	6		1	42.42524075	-71.16093237

Total Tree Count 665

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Master Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
434	Tree of Heaven	Ailanthus alitissima	1	157
435	Tree of Heaven	Ailanthus alitissima	1	1063
436	Tree of Heaven	Ailanthus alitissima	1	549
437	Tree of Heaven	Ailanthus alitissima	1	621
438	Tree of Heaven	Ailanthus alitissima	1	113
439	Tree of Heaven	Ailanthus alitissima	1	179
440	Boxelder	Acer negundo	1	17
441	Boxelder	Acer negundo	1	38
442	Boxelder	Acer negundo	1	13
443	Wild Rose	Rosa multiflora	1	72
450	Wild Rose	Rosa multiflora	1	57
451	Wild Rose	Rosa multiflora	1	141
452	Poison Ive	Toxicodendron radicans	1	93
453	Tree of Heaven	Ailanthus alitissima	2	647
454	Buckthorn	Rhamnus cathartica	2	49
455	Buckthorn	Rhamnus cathartica	2	37
456	Buckthorn	Rhamnus cathartica	2	44
457	Knottweed	Fallopia japonica	2	75
458	Poison Ive	Toxicodendron radicans	2	90
459	Buckthorn	Rhamnus cathartica	2	61
460	Buckthorn	Rhamnus cathartica	2	52
461	Boxelder	Acer negundo	2	31
462	Wild Rose	Rosa multiflora	2	90
463	Tree of Heaven	Ailanthus alitissima	3	199
464	Poison Ive	Toxicodendron radicans	3	68
465	Wild Rose	Rosa multiflora	3	60
466	Buckthorn	Rhamnus cathartica	3	145
467	Tree of Heaven	Ailanthus alitissima	4	210
468	Boxelder	Acer negundo	4	387
469	Knottweed	Fallopia japonica	5	712
470	Tree of Heaven	Ailanthus alitissima	5	1687
471	Tree of Heaven	Ailanthus alitissima	5	586
472	Boxelder	Acer negundo	5	302
473	Tree of Heaven	Ailanthus alitissima	5	1790
		Total Square Feet		10,438

Area 1 - Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
1	Tree of Heaven	Ailanthus altissima	18	Cluster of sapplings near driveway	1	42.42484566	-71.16019162
2	Tree of Heaven	Ailanthus altissima	15	Cluster on hillside	1	42.42492357	-71.16073851
3	Tree of Heaven	Ailanthus altissima	30	Cluster on hillside	1	42.42484303	-71.16084491
4	Tree of Heaven	Ailanthus altissima	20	Cluster on hillside	1	42.42491462	-71.16096197
5	Black Oak	Quercus velutina	10	Dead	1	42.42501893	-71.16081431
6	Black Oak	Quercus velutina	13	Dead	1	42.42513042	-71.16087632
7	Red Oak	Quercus rubra	16	Dying	1	42.42525299	-71.16101355
8	Tree of Heaven	Ailanthus altissima	26	Mature, remove?	1	42.42529952	-71.1611481
9	Norway Maple	Acer platanoides	10		1	42.42527324	-71.16176142
10	Black Cherry	Prunus serotina	7	Dead	1	42.42515385	-71.16189084
11	Black Cherry	Prunus serotina	9	Dead	1	42.42518267	-71.16195478
12	Norway Maple	Acer platanoides	5		1	42.42514781	-71.16194143
13	Norway Maple	Acer platanoides	5		1	42.42513953	-71.16198581
14	Red Oak	Quercus rubra	6	Dead - on fence	1	42.4251094	-71.16204576
15	Norway Maple	Acer platanoides	3		1	42.42503218	-71.16200498
16	White Oak	Quercus alba	13	Dead	1	42.42500771	-71.16209452
17	Norway Maple	Acer platanoides	5	Saplings around	1	42.42482615	-71.16215634
18	Norway Maple	Acer platanoides	5		1	42.42483244	-71.16221028
19	Norway Maple	Acer platanoides	3		1	42.42478359	-71.16225021
20	Norway Maple	Acer platanoides	5		1	42.42471841	-71.16229285
21	Tree of Heaven	Ailanthus altissima	10		1	42.4243958	-71.16271635
22	Tree of Heaven	Ailanthus altissima	10		1	42.42437938	-71.16275329
23	Tree of Heaven	Ailanthus altissima	10		1	42.42438142	-71.16273344
24	Norway Maple	Acer platanoides	10		1	42.42436564	-71.16271178
25	Tree of Heaven	Ailanthus altissima	10		1	42.42436893	-71.16267893
26	Tree of Heaven	Ailanthus altissima	9		1	42.4243465	-71.16269425
27	Tree of Heaven	Ailanthus altissima	12		1	42.4243036	-71.16272655
28	Tree of Heaven	Ailanthus altissima	11		1	42.42429974	-71.16274193
29	Tree of Heaven	Ailanthus altissima	8		1	42.42427851	-71.16273884
30	Tree of Heaven	Ailanthus altissima	10		1	42.42426774	-71.16276274
31	Tree of Heaven	Ailanthus altissima	9		1	42.42425213	-71.1627573
32	Norway Maple	Acer platanoides	4		1	42.42424185	-71.16281624
33	Norway Maple	Acer platanoides	5		1	42.42422937	-71.1627773
34	Tree of Heaven	Ailanthus altissima	12		1	42.42416802	-71.16275533
35	Tree of Heaven	Ailanthus altissima	12		1	42.42416952	-71.16282845
36	Norway Maple	Acer platanoides	8		1	42.42413379	-71.16273892
37	Tree of Heaven	Ailanthus altissima	13		1	42.42418151	-71.16289344
38	Tree of Heaven	Ailanthus altissima	11		1	42.42414005	-71.1628957
39	Tree of Heaven	Ailanthus altissima	12	Stump	1	42.42412232	-71.16281402
40	Boxelder	Acer negundo	24	Cluster of three	1	42.42409199	-71.16273465
41	White Oak	Quercus alba	18	Dead	1	42.42478249	-71.16213314
42	Tree of Heaven	Ailanthus altissima	14		1	42.42402317	-71.1627737
43	Norway Maple	Acer platanoides	8		1	42.42401581	-71.16290217
44	Norway Maple	Acer platanoides	6		1	42.42402015	-71.16291766
45	Norway Maple	Acer platanoides	8		1	42.42401404	-71.16298457
46	Tree of Heaven	Ailanthus altissima	10		1	42.42400268	-71.16283122
47	Tree of Heaven	Ailanthus altissima	15	Stump	1	42.42393795	-71.16271515
48	Tree of Heaven	Alianthus altisma	12		1	42.42393604	-71.16279222
49	Tree of Heaven	Alianthus altisma	10		1	42.42393703	-71.16287985
50	Tree of Heaven	Alianthus altisma	10		1	42.42394294	-71.16298395
51	Norway Maple	Acer platanoides	10		1	42.42386079	-71.16302617
52	Tree of Heaven	Alianthus altisma	11		1	42.42388945	-71.16289946
53	Tree of Heaven	Alianthus altisma	11		1	42.42387644	-71.16280187
54	Tree of Heaven	Alianthus altisma	12		1	42.42387903	-71.16269746
55	Norway Maple	Acer platanoides	20	5-Stem cluster	1	42.42389276	-71.16264281
56	Boxelder	Acer negundo	4		1	42.42384941	-71.16262116
57	Norway Maple	Acer platanoides	16		1	42.42381754	-71.16282508
58	Norway Maple	Acer platanoides	14		1	42.42381611	-71.16294318
59	Norway Maple	Acer platanoides	14		1	42.42379849	-71.1630519

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
60	Black Locust	Robinia pseudoacacia	13		1	42.42373158	-71.16304551
61	Norway Maple	Acer platanoides	7		1	42.42376722	-71.16296773
62	Norway Maple	Acer platanoides	7		1	42.42376661	-71.1628949
63	Norway Maple	Acer platanoides	7		1	42.42375777	-71.16280449
64	Tree of Heaven	Ailanthus altissima	26		1	42.42377316	-71.1626861
65	Black Locust	Robinia pseudoacacia	4		1	42.42380421	-71.16261186
66	Red Oak	Quercus rubra	30	Dead	1	42.42370812	-71.16296363
67	Tree of Heaven	Ailanthus altissima	2		1	42.42378206	-71.16259909
68	Tree of Heaven	Ailanthus altissima	2		1	42.42377548	-71.16259403
69	Tree of Heaven	Ailanthus altissima	2		1	42.42377717	-71.16261288
70	Tree of Heaven	Ailanthus altissima	2		1	42.42377162	-71.16260372
71	Tree of Heaven	Ailanthus altissima	2		1	42.42373792	-71.1625177
72	Tree of Heaven	Ailanthus altissima	2		1	42.42373309	-71.16250956
73	Tree of Heaven	Ailanthus altissima	2		1	42.42372866	-71.16249957
74	Tree of Heaven	Ailanthus altissima	2		1	42.42372388	-71.16248939
75	Tree of Heaven	Ailanthus altissima	2		1	42.42371928	-71.16247972
76	Tree of Heaven	Ailanthus altissima	4		1	42.42369785	-71.16266871
77	Boxelder	Acer negundo	5		1	42.42371577	-71.16263433
78	Boxelder	Acer negundo	4		1	42.42369952	-71.16260844
79	Tree of Heaven	Ailanthus altissima	2		1	42.42367117	-71.1625151
80	Tree of Heaven	Ailanthus altissima	2		1	42.42366948	-71.16250971
81	Tree of Heaven	Ailanthus altissima	2		1	42.42366566	-71.16251466
82	Tree of Heaven	Ailanthus altissima	2		1	42.42366499	-71.16250829
83	Tree of Heaven	Ailanthus altissima	2		1	42.42366108	-71.16251382
84	Tree of Heaven	Ailanthus altissima	6		1	42.42363768	-71.1626781
85	Tree of Heaven	Ailanthus altissima	3		1	42.42362533	-71.16265387
86	Norway Maple	Acer platanoides	8		1	42.42364843	-71.16242065
87	Tree of Heaven	Ailanthus altissima	6		1	42.42363586	-71.16236069
88	Tree of Heaven	Ailanthus altissima	14		1	42.42360297	-71.16246791
89	Tree of Heaven	Ailanthus altissima	13		1	42.42358911	-71.16241829
90	Tree of Heaven	Ailanthus altissima	12		1	42.42357822	-71.16237135
91	Tree of Heaven	Ailanthus altissima	10		1	42.42356931	-71.16233514
92	Black Locust	Robinia pseudoacacia	5		1	42.42355446	-71.16229357
93	Black Locust	Robinia pseudoacacia	7		1	42.42352675	-71.16230027
94	Black Locust	Robinia pseudoacacia	6		1	42.42349804	-71.16232039
95	Tree of Heaven	Ailanthus altissima	2		1	42.42348884	-71.16226535
96	Tree of Heaven	Ailanthus altissima	2		1	42.42348092	-71.16224657
97	Tree of Heaven	Ailanthus altissima	2		1	42.42346706	-71.16223048
98	Tree of Heaven	Ailanthus altissima	2		1	42.42347399	-71.16229753
99	Norway Maple	Acer platanoides	6		1	42.42346508	-71.1622868
100	Tree of Heaven	Ailanthus altissima	2		1	42.4234624	-71.16225328
101	Tree of Heaven	Ailanthus altissima	2		1	42.4234475	-71.16224389
102	Tree of Heaven	Ailanthus altissima	4		1	42.42336768	-71.16212607
103	Tree of Heaven	Ailanthus altissima	4		1	42.4233558	-71.16207779
104	Tree of Heaven	Ailanthus altissima	3		1	42.42333204	-71.16204024
105	Boxelder	Acer negundo	14		1	42.42331485	-71.1618714
106	Black Locust	Robinia pseudoacacia	4		1	42.42332084	-71.16176705
107	Tree of Heaven	Ailanthus altissima	2		1	42.42328515	-71.16179898
108	Black Locust	Robinia pseudoacacia	3		1	42.42327525	-71.16184726
109	Boxelder	Acer negundo	3		1	42.42328119	-71.16189286
110	Black Locust	Robinia pseudoacacia	12		1	42.42329307	-71.16194114
111	Tree of Heaven	Ailanthus altissima	3		1	42.4232767	-71.16201837
112	Tree of Heaven	Ailanthus altissima	5		1	42.42329662	-71.16201392
113	Tree of Heaven	Ailanthus altissima	5		1	42.42327922	-71.16204513
114	Black Locust	Robinia pseudoacacia	12		1	42.42330708	-71.1620462
115	Tree of Heaven	Ailanthus altissima	5		1	42.4232857	-71.16209105
116	Tree of Heaven	Ailanthus altissima	4		1	42.42329176	-71.16212064
117	Tree of Heaven	Ailanthus altissima	3		1	42.4233261	-71.16208316
118	Boxelder	Acer negundo	4		1	42.42333996	-71.16211266

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
119	Tree of Heaven	Ailanthus altissima	3		1	42.4233261	-71.16214485
120	Black Locust	Robinia pseudoacacia	12		1	42.42333996	-71.16217704
121	Tree of Heaven	Ailanthus altissima	3		1	42.42333402	-71.16227091
122	Tree of Heaven	Ailanthus altissima	3		1	42.42333996	-71.1623326
123	Wild Rose	Rosa multiflora	10	Cluster	1	42.42336174	-71.16231919
124	Boxelder	Acer negundo	5		1	42.42337758	-71.16226287
125	Norway Maple	Acer platanoides	15		1	42.42341718	-71.16231383
126	Wild Rose	Rosa multiflora	10	Cluster	1	42.4234091	-71.162451
127	Boxelder	Acer negundo	15		1	42.42346723	-71.16243362
128	Tree of Heaven	Ailanthus altissima	11		1	42.42353693	-71.16245544
129	Norway Maple	Acer platanoides	12		1	42.42351744	-71.16253351
130	Wild Rose	Rosa multiflora	10	Cluster	1	42.42348722	-71.16261337
131	Wild Rose	Rosa multiflora	10	Cluster	1	42.42352981	-71.16260825
132	White Oak	Quercus alba	18	Dead	1	42.42358097	-71.16263284
133	Tree of Heaven	Ailanthus altissima	2		1	42.42352296	-71.16272231
134	Tree of Heaven	Ailanthus altissima	3		1	42.42352916	-71.16277616
135	Tree of Heaven	Ailanthus altissima	3		1	42.42352322	-71.16281908
136	Tree of Heaven	Ailanthus altissima	3		1	42.42354104	-71.16285931
137	Tree of Heaven	Ailanthus altissima	3		1	42.4235252	-71.16291295
138	Norway Maple	Acer platanoides	5		1	42.42359161	-71.1627519
139	Norway Maple	Acer platanoides	4		1	42.42364012	-71.16276128
140	Norway Maple	Acer platanoides	7		1	42.4236025	-71.16283236
141	Norway Maple	Acer platanoides	5		1	42.42358666	-71.16289539
142	Norway Maple	Acer platanoides	6		1	42.42367278	-71.16290076
143	Norway Maple	Acer platanoides	7		1	42.42363517	-71.1629772
144	Norway Maple	Acer platanoides	4		1	42.42358171	-71.16297452
145	Poison Ivy	Toxicodendron radicans	10	Cluster	1	42.42348757	-71.16298339
146	Tree of Heaven	Ailanthus altissima	3		1	42.42349551	-71.16307561
147	Tree of Heaven	Ailanthus altissima	3		1	42.42348858	-71.16311316
148	Norway Maple	Acer platanoides	7		1	42.42353617	-71.16309656
149	Shagbark Hickory	Carya ovata	12	Dead	1	42.42358565	-71.1630681
150	Norway Maple	Acer platanoides	6		1	42.42363418	-71.16306035
151	Norway Maple	Acer platanoides	6		1	42.42367377	-71.16309254
152	Norway Maple	Acer platanoides	7		1	42.42374604	-71.1631502
153	Norway Maple	Acer platanoides	5		1	42.42370941	-71.16319312
154	Norway Maple	Acer platanoides	8		1	42.4236906	-71.16323201
155	Norway Maple	Acer platanoides	12		1	42.42364804	-71.16322799
156	Norway Maple	Acer platanoides	6		1	42.4235926	-71.163173
157	Norway Maple	Acer platanoides	6		1	42.42360545	-71.16327195
158	Norway Maple	Acer platanoides	5		1	42.4236025	-71.16335271
159	Norway Maple	Acer platanoides	4		1	42.42355894	-71.16323335
160	Norway Maple	Acer platanoides	7		1	42.42351142	-71.16320385
161	Tree of Heaven	Ailanthus altissima	3		1	42.42348165	-71.16320302
162	Norway Maple	Acer platanoides	4		1	42.4234718	-71.16332828
163	Norway Maple	Acer platanoides	4		1	42.42350845	-71.16330309
164	Norway Maple	Acer platanoides	8		1	42.42355201	-71.16334869
165	Norway Maple	Acer platanoides	5		1	42.42352724	-71.16337522
166	Norway Maple	Acer platanoides	11		1	42.42348766	-71.16338758
167	Norway Maple	Acer platanoides	7		1	42.42347477	-71.16345702
168	Norway Maple	Acer platanoides	11		1	42.42344111	-71.1634007
169	Norway Maple	Acer platanoides	8		1	42.42340542	-71.16345649
170	Norway Maple	Acer platanoides	8		1	42.42305997	-71.16392775
171	Norway Maple	Acer platanoides	8		1	42.42286296	-71.16412355
172	Norway Maple	Acer platanoides	17		1	42.42284663	-71.16414903
173	Norway Maple	Acer platanoides	17		1	42.42281742	-71.16418457
174	Norway Maple	Acer platanoides	9		1	42.42279614	-71.16417049
175	Norway Maple	Acer platanoides	10		1	42.42277238	-71.16419664
176	Norway Maple	Acer platanoides	7		1	42.42276495	-71.16421341
728	Norway Maple	Acer platanoides	8	Dead	1	42.42491605	-71.16009082

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Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
729	Norway Maple	Acer platanoides	6		1	42.42494377	-71.16005059
730	Norway Maple	Acer platanoides	3		1	42.42498139	-71.16002779
731	Norway Maple	Acer platanoides	4		1	42.42501405	-71.16002243
732	Norway Maple	Acer platanoides	4		1	42.42499129	-71.16009082
733	Norway Maple	Acer platanoides	3		1	42.42498035	-71.16011568
734	Norway Maple	Acer platanoides	3		1	42.42498634	-71.16013106
735	Norway Maple	Acer platanoides	6		1	42.42501603	-71.16012972
736	Norway Maple	Acer platanoides	4		1	42.42499178	-71.16018135
737	Tree of Heaven	Ailanthus altissima	7		1	42.42521402	-71.16087872
738	Tree of Heaven	Ailanthus altissima	6		1	42.42524075	-71.16093237

Total Tree Count 187

Area 1 – Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
434	Tree of Heaven	Ailanthus alitissima	1	157
435	Tree of Heaven	Ailanthus alitissima	1	1063
436	Tree of Heaven	Ailanthus alitissima	1	549
437	Tree of Heaven	Ailanthus alitissima	1	621
438	Tree of Heaven	Ailanthus alitissima	1	113
439	Tree of Heaven	Ailanthus alitissima	1	179
440	Boxelder	Acer negundo	1	17
441	Boxelder	Acer negundo	1	38
442	Boxelder	Acer negundo	1	13
443	Wild Rose	Rosa multiflora	1	72
450	Wild Rose	Rosa multiflora	1	57
451	Wild Rose	Rosa multiflora	1	141
452	Poison Ive	Toxicodendron radica	1	93
			Total Square Feet	3,115

Area 2 – Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
177	Norway Maple	Acer platanoides	14		2	42.42308064	-71.16366586
178	Norway Maple	Acer platanoides	6		2	42.42306876	-71.16368732
179	Norway Maple	Acer platanoides	5		2	42.42304995	-71.16370743
180	Norway Maple	Acer platanoides	10		2	42.42306183	-71.16361087
181	Norway Maple	Acer platanoides	10		2	42.42304797	-71.16359612
182	Norway Maple	Acer platanoides	6		2	42.42301183	-71.16365312
183	Buckthorn	Rhamnus cathartica	10		2	42.42301728	-71.16366049
184	Norway Maple	Acer platanoides	10		2	42.42302619	-71.16367391
185	Buckthorn	Rhamnus cathartica	10		2	42.42301728	-71.16374364
186	Norway Maple	Acer platanoides	12		2	42.42300837	-71.16372487
187	Norway Maple	Acer platanoides	13		2	42.42299055	-71.16369536
188	Norway Maple	Acer platanoides	9		2	42.42297075	-71.16367793
189	Norway Maple	Acer platanoides	14		2	42.42295293	-71.16372219
190	Norway Maple	Acer platanoides	12		2	42.4229559	-71.16378991
191	Norway Maple	Acer platanoides	10		2	42.42292818	-71.16381539
192	Norway Maple	Acer platanoides	14		2	42.42292521	-71.1635988
193	Buckthorn	Rhamnus cathartica	6		2	42.42289918	-71.16387005
194	Norway Maple	Acer platanoides	16		2	42.42289155	-71.16384624
195	Norway Maple	Acer platanoides	12		2	42.42287373	-71.16377315
196	Norway Maple	Acer platanoides	5		2	42.42285987	-71.16374901
197	Norway Maple	Acer platanoides	8		2	42.42283611	-71.16370207
198	Norway Maple	Acer platanoides	12		2	42.42282225	-71.16391597
199	Norway Maple	Acer platanoides	9		2	42.42280146	-71.16386568
200	Norway Maple	Acer platanoides	5		2	42.42279454	-71.16380837
201	Norway Maple	Acer platanoides	12		2	42.42273315	-71.1639723
202	Norway Maple	Acer platanoides	12	Dead	2	42.42272919	-71.16395353
203	Norway Maple	Acer platanoides	13		2	42.42274602	-71.16389519
204	Norway Maple	Acer platanoides	12		2	42.42271335	-71.16390189
205	Norway Maple	Acer platanoides	14		2	42.42269949	-71.16393944
206	Norway Maple	Acer platanoides	12		2	42.42265296	-71.16397699
207	Norway Maple	Acer platanoides	8		2	42.42265296	-71.16392469
208	Norway Maple	Acer platanoides	14		2	42.42262425	-71.16386837
209	Norway Maple	Acer platanoides	12		2	42.42265989	-71.16369268
210	Norway Maple	Acer platanoides	9		2	42.42268563	-71.16367659
211	Norway Maple	Acer platanoides	10		2	42.42271434	-71.16369804
212	Norway Maple	Acer platanoides	6		2	42.4226886	-71.16380399
213	Norway Maple	Acer platanoides	11		2	42.42273711	-71.16379997
214	Norway Maple	Acer platanoides	12		2	42.42276384	-71.16367927
215	Norway Maple	Acer platanoides	8		2	42.42275196	-71.16363233
216	Black Locust	Robinia pseudoacacia	15		2	42.42275543	-71.16349286
217	Norway Maple	Acer platanoides	13		2	42.42280641	-71.16365915
218	Norway Maple	Acer platanoides	9		2	42.42280196	-71.1635988
219	Norway Maple	Acer platanoides	60	Multi-stem	2	42.42283413	-71.16349822
220	Norway Maple	Acer platanoides	4		2	42.4230247	-71.16351834
221	Norway Maple	Acer platanoides	4		2	42.42301579	-71.16347408
222	Norway Maple	Acer platanoides	4		2	42.42299401	-71.16352102
223	Norway Maple	Acer platanoides	4		2	42.42298807	-71.16349956

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
224	Norway Maple	Acer platanoides	5		2	42.42296827	-71.16344592
225	Norway Maple	Acer platanoides	5		2	42.42295738	-71.16341641
226	Norway Maple	Acer platanoides	10	Dead	2	42.42292967	-71.16338423
227	Norway Maple	Acer platanoides	5		2	42.4229168	-71.16342982
228	Norway Maple	Acer platanoides	7		2	42.42288611	-71.16340837
229	Norway Maple	Acer platanoides	6		2	42.42288413	-71.16336009
230	Norway Maple	Acer platanoides	12		2		
231	Norway Maple	Acer platanoides	36	Triple-Stem	2	42.42280562	-71.16322194
232	Norway Maple	Acer platanoides	8		2	42.42277895	-71.16323898
233	Norway Maple	Acer platanoides	4		2	42.42277004	-71.16327653
234	Norway Maple	Acer platanoides	10		2	42.42278879	-71.16333728
235	Norway Maple	Acer platanoides	16		2	42.42274628	-71.16334091
236	Norway Maple	Acer platanoides	10		2	42.4227146	-71.1633342
237	Norway Maple	Acer platanoides	11		2	42.42271856	-71.16337309
238	Black Locust	Robinia pseudoacacia	16		2	42.42273737	-71.16339723
239	Norway Maple	Acer platanoides	6		2	42.42267995	-71.16335968
240	Norway Maple	Acer platanoides	6		2	42.4226948	-71.16339455
241	Tree of Heaven	Ailanthus altissima	14		2	42.42271259	-71.16343066
241	Norway Maple	Acer platanoides	10		2	42.422672	-71.16343737
242	Norway Maple	Acer platanoides	11		2	42.42267497	-71.16358623
243	Norway Maple	Acer platanoides	10		2	42.42264032	-71.16372704
244	Norway Maple	Acer platanoides	4		2	42.42264131	-71.16377264
245	Norway Maple	Acer platanoides	5		2	42.42260468	-71.16378739
246	Norway Maple	Acer platanoides	8		2	42.42256535	-71.16380533
247	Norway Maple	Acer platanoides	7		2	42.42255595	-71.16386702
248	Norway Maple	Acer platanoides	14		2	42.42251536	-71.1638402
249	Norway Maple	Acer platanoides	8		2	42.42254132	-71.16374314
250	Norway Maple	Acer platanoides	4		2	42.42258488	-71.16371229
251	Norway Maple	Acer platanoides	4		2	42.42260171	-71.16373509
252	Norway Maple	Acer platanoides	9		2	42.42262349	-71.16368011
253	Norway Maple	Acer platanoides	13		2	42.42262052	-71.16358489
254	Norway Maple	Acer platanoides	5		2	42.42258092	-71.16363585
255	Norway Maple	Acer platanoides	9		2	42.42252251	-71.16370425
256	Norway Maple	Acer platanoides	18		2	42.42249875	-71.16376996
257	Norway Maple	Acer platanoides	8		2	42.42247202	-71.16380885
258	Norway Maple	Acer platanoides	10		2	42.42244034	-71.16377264
259	Norway Maple	Acer platanoides	8		2	42.42247796	-71.16371229
260	Norway Maple	Acer platanoides	7		2	42.42245024	-71.16369754
261	Norway Maple	Acer platanoides	7		2	42.42247499	-71.16367206
262	Norway Maple	Acer platanoides	10		2	42.42252845	-71.16364658
263	Norway Maple	Acer platanoides	7		2	42.42254825	-71.16360501
264	Norway Maple	Acer platanoides	12		2	42.42257597	-71.16355136
265	Norway Maple	Acer platanoides	14		2	42.42263042	-71.16350174
266	Norway Maple	Acer platanoides	8		2	42.42264728	-71.16341601
267	Norway Maple	Acer platanoides	14		2	42.42261858	-71.16341735
268	Norway Maple	Acer platanoides	10		2	42.42260769	-71.16346295
269	Norway Maple	Acer platanoides	9		2	42.42255023	-71.1635299

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
270	Norway Maple	Acer platanoides	4		2	42.42251162	-71.16357416
271	Black Oak	Quercus velutina	50	Dead	2	42.42244727	-71.16363853
272	Norway Maple	Acer platanoides	9		2	42.42242054	-71.16371632
273	Norway Maple	Acer platanoides	4		2	42.42240668	-71.163719
274	Norway Maple	Acer platanoides	7		2	42.42241262	-71.16369754
275	Norway Maple	Acer platanoides	6		2	42.42241163	-71.16366535
276	Shagbark Hickory	Carya ovata	4	Dead	2	42.42239282	-71.16359964
277	Norway Maple	Acer platanoides	7		2	42.4224344	-71.16360098
278	Black Oak	Quercus velutina	30	Dead	2	42.4224641	-71.1635755
279	Norway Maple	Acer platanoides	16		2	42.42245968	-71.16352799
280	Norway Maple	Acer platanoides	10		2	42.42249479	-71.16353661
281	Norway Maple	Acer platanoides	4		2	42.42246463	-71.16347971
282	Norway Maple	Acer platanoides	4		2	42.42248047	-71.16343545
283	Norway Maple	Acer platanoides	12		2	42.4224973	-71.16347837
284	Norway Maple	Acer platanoides	7		2	42.42252304	-71.16340729
285	Norway Maple	Acer platanoides	4		2	42.42255274	-71.16345557
286	Norway Maple	Acer platanoides	4		2	42.42260818	-71.16335097
287	Norway Maple	Acer platanoides	12		2	42.42263293	-71.16334158
288	Norway Maple	Acer platanoides	12		2	42.42259478	-71.16367474
289	Knotweed	Fallopia japonica	10		2	42.4226849	-71.16329129
290	Black Locust	Robinia pseudoacacia	15		2	42.42270668	-71.16329531
291	Norway Maple	Acer platanoides	4		2	42.42274331	-71.16319607
292	Norway Maple	Acer platanoides	5		2	42.42271559	-71.16319607
293	Norway Maple	Acer platanoides	6		2	42.42271658	-71.16322557
294	Norway Maple	Acer platanoides	4		2	42.42269183	-71.16321753
421	Tree of Heaven	Ailanthus altissima	3		2	42.42310359	-71.16349187
422	Tree of Heaven	Ailanthus altissima	3		2	42.42306275	-71.16342824
423	Tree of Heaven	Ailanthus altissima	3		2	42.42302599	-71.16336462
424	Tree of Heaven	Ailanthus altissima	3		2	42.42298106	-71.16330653
425	Tree of Heaven	Ailanthus altissima	3		2	42.42294226	-71.16324567
426	Tree of Heaven	Ailanthus altissima	3		2	42.42290347	-71.16319034
427	Tree of Heaven	Ailanthus altissima	3		2	42.42285446	-71.16314331
428	Tree of Heaven	Ailanthus altissima	3		2	42.42281566	-71.16309629

Total Tree Count 127

Area 2 – Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
453	Tree of Heaven	Ailanthus alitissima	2	647
454	Buckthorn	Rhamnus cathartica	2	49
455	Buckthorn	Rhamnus cathartica	2	37
456	Buckthorn	Rhamnus cathartica	2	44
457	Knottweed	Fallopia japonica	2	75
458	Poison Ive	Toxicodendron radicans	2	90
459	Buckthorn	Rhamnus cathartica	2	61
460	Buckthorn	Rhamnus cathartica	2	52
461	Boxelder	Acer negundo	2	31
462	Wild Rose	Rosa multiflora	2	90
			Total Square Feet	1,176

Area 3 – Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
295	Norway Maple	Acer platanoides	6		3	42.42270048	-71.16313662
296	Norway Maple	Acer platanoides	6		3	42.42268068	-71.16310577
297	Norway Maple	Acer platanoides	14		3	42.42264801	-71.16314332
298	Norway Maple	Acer platanoides	9		3	42.42259158	-71.1632144
299	Norway Maple	Acer platanoides	4		3	42.42255792	-71.16322513
300	Norway Maple	Acer platanoides	9		3	42.4225203	-71.16324927
301	Norway Maple	Acer platanoides	10		3	42.42251337	-71.16330828
302	Norway Maple	Acer platanoides	6		3	42.42252601	-71.16335231
303	Norway Maple	Acer platanoides	4		3	42.4224775	-71.16338718
304	Norway Maple	Acer platanoides	4		3	42.42244582	-71.16340461
305	Norway Maple	Acer platanoides	5		3	42.42241612	-71.16348776
306	Norway Maple	Acer platanoides	11		3	42.42237256	-71.16352263
307	Norway Maple	Acer platanoides	8		3	42.42239434	-71.16347166
308	Norway Maple	Acer platanoides	8		3	42.42237652	-71.16344618
309	Norway Maple	Acer platanoides	7		3	42.4224082	-71.16341534
310	Norway Maple	Acer platanoides	12		3	42.42242701	-71.16338986
311	Norway Maple	Acer platanoides	4		3	42.42243493	-71.16336706
312	Red Oak	Quercus rubra	50	Dead	3	42.42247377	-71.1633123
313	Norway Maple	Acer platanoides	5		3	42.42247179	-71.16325061
314	Norway Maple	Acer platanoides	10		3	42.4224312	-71.16325195
315	Norway Maple	Acer platanoides	6		3	42.42242724	-71.16327475
316	Norway Maple	Acer platanoides	10		3	42.42238269	-71.16329487
317	Norway Maple	Acer platanoides	11		3	42.42239655	-71.16331364
318	Norway Maple	Acer platanoides	8		3	42.42239556	-71.16334851
319	Norway Maple	Acer platanoides	5		3	42.42233716	-71.16344105
320	Norway Maple	Acer platanoides	10		3	42.42233023	-71.1634035
321	Norway Maple	Acer platanoides	8		3	42.42231835	-71.16338338
322	Norway Maple	Acer platanoides	10		3	42.42229657	-71.16336326
323	Norway Maple	Acer platanoides	18		3	42.4223629	-71.16334583
324	Norway Maple	Acer platanoides	10		3	42.4223431	-71.16332571
325	Black Locust	Robinia pseudoacacia	12		3	42.42240348	-71.16322915
326	Norway Maple	Acer platanoides	4		3	42.42243219	-71.16319965
327	Norway Maple	Acer platanoides	12		3	42.42245199	-71.16319428
328	Norway Maple	Acer platanoides	6		3	42.4224807	-71.1631688
329	Norway Maple	Acer platanoides	8		3	42.42251337	-71.16313394
330	Red Oak	Quercus rubra	10	Dead	3	42.42254109	-71.1630937
331	Norway Maple	Acer platanoides	5		3	42.42256782	-71.16314466
332	Black Locust	Robinia pseudoacacia	12		3	42.42260247	-71.16313528
333	Black Locust	Robinia pseudoacacia	16		3	42.42257871	-71.16308029
334	Black Locust	Robinia pseudoacacia	11		3	42.42262326	-71.16305347
335	Black Locust	Robinia pseudoacacia	12		3	42.42266286	-71.16305079
336	Norway Maple	Acer platanoides	12		3	42.42264108	-71.16301592
337	Norway Maple	Acer platanoides	12		3	42.42265324	-71.1629362
338	Norway Maple	Acer platanoides	10		3	42.42261275	-71.16294229
339	Norway Maple	Acer platanoides	10		3	42.42258414	-71.16289887

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
340	Black Locust	Robinia pseudoacacia	12		3	42.42256988	-71.16296541
341	Norway Maple	Acer platanoides	9		3	42.42254157	-71.16292972
342	Norway Maple	Acer platanoides	10		3	42.42253501	-71.16300938
343	Black Locust	Robinia pseudoacacia	12		3	42.42249514	-71.1630459
344	Norway Maple	Acer platanoides	7		3	42.42247722	-71.16296459
345	Norway Maple	Acer platanoides	8	Dual-stem	3	42.42247327	-71.16296364
346	Norway Maple	Acer platanoides	7		3	42.42244146	-71.16306739
347	Norway Maple	Acer platanoides	8		3	42.42240696	-71.16300255
348	Norway Maple	Acer platanoides	7		3	42.42239607	-71.16309911
349	Black Locust	Robinia pseudoacacia	16		3	42.42236539	-71.16302534
350	Norway Maple	Acer platanoides	10		3	42.42233115	-71.16309573
351	Norway Maple	Acer platanoides	7		3	42.42234455	-71.16314288
352	Norway Maple	Acer platanoides	4		3	42.42232418	-71.16320023
353	Norway Maple	Acer platanoides	4		3	42.42230636	-71.16321767
354	Norway Maple	Acer platanoides	7		3	42.42229383	-71.16318444
355	Black Locust	Robinia pseudoacacia	6		3	42.42229855	-71.16314466
356	Norway Maple	Acer platanoides	14		3	42.42227479	-71.1633056
357	Norway Maple	Acer platanoides	8		3	42.42224311	-71.16327207
358	Norway Maple	Acer platanoides	5		3	42.42222331	-71.1632372
359	Black Locust	Robinia pseudoacacia	6		3	42.42224707	-71.16317953
360	Norway Maple	Acer platanoides	6		3	42.42221044	-71.16316612
361	Norway Maple	Acer platanoides	8		3	42.4221946	-71.1631393
362	Norway Maple	Acer platanoides	5		3	42.42224014	-71.16315003
363	Norway Maple	Acer platanoides	4		3	42.42228451	-71.16311737
364	Black Locust	Robinia pseudoacacia	12		3	42.42218668	-71.16309236
365	Norway Maple	Acer platanoides	8		3	42.42216589	-71.16304542
366	Norway Maple	Acer platanoides	4		3	42.42219064	-71.16300385
367	Norway Maple	Acer platanoides	5		3	42.4222561	-71.16299448
368	Norway Maple	Acer platanoides	7		3	42.42231711	-71.16300417
369	Norway Maple	Acer platanoides	8		3	42.42232935	-71.16290865
370	Norway Maple	Acer platanoides	7		3	42.42241278	-71.16289117
371	Norway Maple	Acer platanoides	6		3	42.42249406	-71.16289256
372	Norway Maple	Acer platanoides	6		3	42.42253861	-71.1628644
374	Black Locust	Robinia pseudoacacia	12		3	42.42254257	-71.16278527
375	Red Oak	Quercus rubra	24	Dead	3	42.42248379	-71.162796
376	Norway Maple	Acer platanoides	8		3	42.42244221	-71.16281746
377	Norway Maple	Acer platanoides	7		3	42.4223694	-71.16283694
378	Norway Maple	Acer platanoides	12		3	42.42229569	-71.16286037
379	Black Locust	Robinia pseudoacacia	12		3	42.42225808	-71.1629167
380	Norway Maple	Acer platanoides	7		3	42.42218272	-71.1629435
381	Norway Maple	Acer platanoides	8		3	42.4221352	-71.16299714
381	Black Locust	Robinia pseudoacacia	12		3	42.42224026	-71.16283892
382	Norway Maple	Acer platanoides	8		3	42.42228603	-71.16279218
383	Norway Maple	Acer platanoides	9		3	42.42233058	-71.16276669
384	Norway Maple	Acer platanoides	10		3	42.42237117	-71.16274926

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
385	Norway Maple	Acer platanoides	7		3	42.42238404	-71.16271573
386	Norway Maple	Acer platanoides	11		3	42.42242067	-71.16269428
387	Black Locust	Robinia pseudoacacia	12		3	42.42243453	-71.1627506
389	Norway Maple	Acer platanoides	6		3	42.42248402	-71.16271471
401	Norway Maple	Acer platanoides	8		3	42.42234246	-71.16267818
402	Norway Maple	Acer platanoides	10		3	42.4222989	-71.16270903
403	Black Locust	Robinia pseudoacacia	12		3	42.42224224	-71.16271553
404	Black Locust	Robinia pseudoacacia	10		3	42.4221967	-71.16279868
405	Norway Maple	Acer platanoides	10		3	42.42216193	-71.16287376
406	Norway Maple	Acer platanoides	12		3	42.42210649	-71.16291802
407	Norway Maple	Acer platanoides	4		3	42.42210451	-71.16285901
408	Norway Maple	Acer platanoides	12		3	42.42212035	-71.16278659
409	Tree of Heaven	Ailanthus altissima	4		3	42.42209681	-71.16269513
410	Tree of Heaven	Ailanthus altissima	6		3	42.42218482	-71.16267798
411	Tree of Heaven	Ailanthus altissima	5		3	42.42224979	-71.16264207
429	Tree of Heaven	Ailanthus altissima	3		3	42.42279728	-71.163005
430	Tree of Heaven	Ailanthus altissima	3		3	42.42276461	-71.16292201
431	Tree of Heaven	Ailanthus altissima	3		3	42.42275848	-71.16282519

Total Tree Count 108

Area 3 – Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
463	Tree of Heaven	Ailanthus alitissima	3	199
464	Poison Ive	Toxicodendron radicans	3	68
465	Wild Rose	Rosa multiflora	3	60
466	Buckthorn	Rhamnus cathartica	3	145
		Total Sqaure Feet		473

Area 4 – Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
373	Norway Maple	Acer platanoides	10		4	42.42265215	-71.16273769
388	Norway Maple	Acer platanoides	4		4	42.42246126	-71.16266477
390	Norway Maple	Acer platanoides	12		4	42.42252537	-71.16268335
391	Black Locust	Robinia pseudoacacia	12		4	42.42253645	-71.16259625
392	Black Locust	Robinia pseudoacacia	12		4	42.42259233	-71.16264475
393	Norway Maple	Acer platanoides	8		4	42.42260773	-71.1625882
394	Norway Maple	Acer platanoides	7		4	42.42269116	-71.16257072
395	Norway Maple	Acer platanoides	8		4	42.42268649	-71.16246898
396	Norway Maple	Acer platanoides	7		4	42.42264778	-71.16251649
397	Norway Maple	Acer platanoides	12		4	42.42257407	-71.16253993
398	Norway Maple	Acer platanoides	12		4	42.42253095	-71.16256965
399	Norway Maple	Acer platanoides	6		4	42.42247749	-71.16257233
400	Norway Maple	Acer platanoides	8		4	42.42240423	-71.16260452
412	Norway Maple	Acer platanoides	4		4	42.42229929	-71.16262866
413	Norway Maple	Acer platanoides	4		4	42.42234285	-71.16260184
414	Norway Maple	Acer platanoides	7		4	42.42241579	-71.16246001
416	Norway Maple	Acer platanoides	10		4	42.42247359	-71.1625048
417	Black Locust	Robinia pseudoacacia	12		4	42.42251863	-71.16251847
418	Norway Maple	Acer platanoides	8		4	42.4225644	-71.16247173
419	Norway Maple	Acer platanoides	9		4	42.42260895	-71.16244625
420	Norway Maple	Acer platanoides	10		4	42.42266292	-71.16239658
432	Tree of Heaven	Ailanthus altissima	3		4	42.42276461	-71.16270624
433	Norway Maple	Acer platanoides	7		4	42.4227546	-71.16237716
444	Red Oak	Quercus rubra	14	Dead	4	42.4228565	-71.16250983
445	Red Oak	Quercus rubra	16	Dead	4	42.4229198	-71.16244344
446	Boxelder	Acer negundo	6		4	42.42300773	-71.16240964
447	Boxelder	Acer negundo	6		4	42.42295866	-71.16228072
448	Buckthorn	Acer negundo	6		4	42.4229081	-71.16215986
449	Tree of Heaven	Ailanthus altissima	3		4	42.42288917	-71.1620202
500	Tree of Heaven	Ailanthus altissima	3		4	42.42285037	-71.16189295
501	Boxelder	Acer negundo	6		4	42.42283078	-71.16182346
502	Norway Maple	Acer platanoides	12		4	42.42289502	-71.1622652
503	Norway Maple	Acer platanoides	10		4	42.42282592	-71.16222788
504	Black Locust	Robinia pseudoacacia	12		4	42.42281166	-71.16229442
505	Norway Maple	Acer platanoides	10		4	42.42285453	-71.1622713
506	Norway Maple	Acer platanoides	9		4	42.42278335	-71.16225872
507	Norway Maple	Acer platanoides	6		4	42.42278039	-71.1621934
508	Norway Maple	Acer platanoides	6		4	42.42273584	-71.16222157
509	Norway Maple	Acer platanoides	8	Dual-stem	4	42.42271505	-71.16229264
510	Norway Maple	Acer platanoides	8		4	42.4226826	-71.16228407
511	Norway Maple	Acer platanoides	7		4	42.42265456	-71.16222017
512	Norway Maple	Acer platanoides	4		4	42.42262122	-71.16228139
513	Norway Maple	Acer platanoides	8		4	42.42262083	-71.16235773
514	Norway Maple	Acer platanoides	10		4	42.42257727	-71.16238858
515	Black Locust	Robinia pseudoacacia	12		4	42.42252061	-71.16239509

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
516	Norway Maple	Acer platanoides	9		4	42.42248014	-71.16242515
517	Norway Maple	Acer platanoides	8	Dual-stem	4	42.42241185	-71.16245907
518	Norway Maple	Acer platanoides	8		4	42.42234554	-71.16249797
519	Black Locust	Robinia pseudoacacia	16		4	42.42230396	-71.16252077
520	Norway Maple	Acer platanoides	7		4	42.42225569	-71.1624996
521	Norway Maple	Acer platanoides	5		4	42.42225779	-71.16242555
522	Norway Maple	Acer platanoides	7		4	42.42235136	-71.16238659
523	Norway Maple	Acer platanoides	6		4	42.42243264	-71.16238799
524	Norway Maple	Acer platanoides	6		4	42.42247719	-71.16235982
525	Tree of Heaven	Ailanthus altissima	5		4	42.42252817	-71.16232162
526	Norway Maple	Acer platanoides	4		4	42.42257767	-71.16230821
527	Red Oak	Quercus rubra	24	Dead	4	42.42272557	-71.16212501
528	Norway Maple	Acer platanoides	8		4	42.42268399	-71.16214646
529	Norway Maple	Acer platanoides	6		4	42.4227258	-71.16204371
530	Black Locust	Robinia pseudoacacia	12		4	42.42267631	-71.16207961
531	Norway Maple	Acer platanoides	7		4	42.42261118	-71.16216594
532	Norway Maple	Acer platanoides	10		4	42.42261295	-71.16207827
533	Black Locust	Robinia pseudoacacia	12		4	42.42248115	-71.1622807
534	Red Oak	Quercus rubra	24	Dead	4	42.42242237	-71.16229143
535	Norway Maple	Acer platanoides	8		4	42.42238079	-71.16231288
536	Norway Maple	Acer platanoides	7		4	42.42230798	-71.16233236
537	Norway Maple	Acer platanoides	12		4	42.42223427	-71.1623558
538	Norway Maple	Acer platanoides	8		4	42.4222246	-71.1622876
539	Norway Maple	Acer platanoides	9		4	42.42226915	-71.16226212
540	Norway Maple	Acer platanoides	10		4	42.42230974	-71.16224469
541	Norway Maple	Acer platanoides	11		4	42.42235924	-71.1621897
542	Black Locust	Robinia pseudoacacia	12		4	42.4223731	-71.16224603
543	Norway Maple	Acer platanoides	4		4	42.42239983	-71.1621602
544	Norway Maple	Acer platanoides	6		4	42.4224226	-71.16221013
545	Norway Maple	Acer platanoides	12		4	42.42246395	-71.16217877
546	Black Locust	Robinia pseudoacacia	12		4	42.42247502	-71.16209168
547	Norway Maple	Acer platanoides	7		4	42.42262582	-71.16204474
548	Norway Maple	Acer platanoides	11		4	42.42266245	-71.16202328
549	Norway Maple	Acer platanoides	4		4	42.42270304	-71.16199378
550	Norway Maple	Acer platanoides	6		4	42.42271927	-71.16190134
551	Norway Maple	Acer platanoides	7		4	42.42242716	-71.16170482
552	Norway Maple	Acer platanoides	8		4	42.42264601	-71.16193353
553	Norway Maple	Acer platanoides	9		4	42.4225847	-71.1619188
554	Norway Maple	Acer platanoides	10		4	42.42257814	-71.16199846
555	Norway Maple	Acer platanoides	8	Dual-stem	4	42.4225164	-71.16195272
556	Norway Maple	Acer platanoides	7		4	42.42252035	-71.16195367
557	Norway Maple	Acer platanoides	12		4	42.42246952	-71.16206508
558	Norway Maple	Acer platanoides	8		4	42.42245009	-71.16199163
559	Black Locust	Robinia pseudoacacia	16		4	42.42240851	-71.16201443
560	Norway Maple	Acer platanoides	6		4	42.42241607	-71.16206776

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
561	Norway Maple	Acer platanoides	8		4	42.42234281	-71.16209995
562	Norway Maple	Acer platanoides	8		4	42.42228103	-71.16217361
563	Norway Maple	Acer platanoides	4		4	42.42228143	-71.16209727
564	Norway Maple	Acer platanoides	10		4	42.42222702	-71.16214072
565	Norway Maple	Acer platanoides	8		4	42.42217514	-71.16218101
566	Norway Maple	Acer platanoides	10		4	42.42208203	-71.16209593
567	Norway Maple	Acer platanoides	4		4	42.42219212	-71.16208691
568	Norway Maple	Acer platanoides	12		4	42.42218199	-71.16201057
569	Black Locust	Robinia pseudoacacia	12		4	42.42216184	-71.16194308
570	Norway Maple	Acer platanoides	8		4	42.42225205	-71.16192643
571	Norway Maple	Acer platanoides	8		4	42.4222879	-71.16199217
572	Norway Maple	Acer platanoides	9		4	42.4222966	-71.16190095
573	Norway Maple	Acer platanoides	7		4	42.42236024	-71.16199325
574	Norway Maple	Acer platanoides	8		4	42.42237248	-71.16189774
575	Norway Maple	Acer platanoides	7		4	42.42245591	-71.16188025
576	Norway Maple	Acer platanoides	6		4	42.42253719	-71.16188164

Total Tree Count 106

Area 4 – Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
467	Tree of Heaven	Ailanthus alitissima	4	210
468	Boxelder	Acer negundo	4	387
		Total Square Feet		596

Area 5 – Tree List

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
577	Black Locust	Robinia pseudoacacia	12		5	42.4225857	-71.16177436
578	Red Oak	Quercus rubra	24	Dead	5	42.42252692	-71.16178508
579	Norway Maple	Acer platanoides	8		5	42.42248534	-71.16180654
580	Norway Maple	Acer platanoides	7		5	42.42241253	-71.16182602
581	Norway Maple	Acer platanoides	12		5	42.42233882	-71.16184946
582	Norway Maple	Acer platanoides	10		5	42.42226492	-71.16184329
583	Black Locust	Robinia pseudoacacia	12		5	42.42220826	-71.16184979
584	Tree of Heaven	Ailanthus altissima	5		5	42.42221581	-71.16177633
585	Norway Maple	Acer platanoides	4		5	42.42226531	-71.16176292
586	Norway Maple	Acer platanoides	8		5	42.42232916	-71.16178126
587	Norway Maple	Acer platanoides	9		5	42.42237371	-71.16175578
588	Norway Maple	Acer platanoides	10		5	42.42241429	-71.16173834
589	Norway Maple	Acer platanoides	11		5	42.42246379	-71.16168336
590	Black Locust	Robinia pseudoacacia	12		5	42.42247765	-71.16173969
591	Norway Maple	Acer platanoides	4		5	42.42250438	-71.16165385
592	Norway Maple	Acer platanoides	6		5	42.42252715	-71.16170379
593	Norway Maple	Acer platanoides	12		5	42.4225685	-71.16167243
594	Norway Maple	Acer platanoides	7		5	42.42268763	-71.16164916
595	Norway Maple	Acer platanoides	4		5	42.42274518	-71.16165145
596	Norway Maple	Acer platanoides	6		5	42.42279768	-71.16156038
597	Norway Maple	Acer platanoides	6		5	42.42271635	-71.16153834
598	Norway Maple	Acer platanoides	12		5	42.42257408	-71.16155874
599	Norway Maple	Acer platanoides	6		5	42.42252062	-71.16156142
600	Norway Maple	Acer platanoides	8		5	42.42244736	-71.1615936
601	Norway Maple	Acer platanoides	8		5	42.42238559	-71.16166727
602	Norway Maple	Acer platanoides	10		5	42.42234203	-71.16169811
603	Norway Maple	Acer platanoides	4		5	42.42238598	-71.16159092
604	Norway Maple	Acer platanoides	4		5	42.42234242	-71.16161774
605	Norway Maple	Acer platanoides	8		5	42.42222749	-71.16163834
606	Norway Maple	Acer platanoides	6		5	42.42232417	-71.16155131
607	Norway Maple	Acer platanoides	4		5	42.42233203	-71.16147371
608	Norway Maple	Acer platanoides	4		5	42.4223933	-71.16146265
609	Norway Maple	Acer platanoides	6		5	42.42241606	-71.16151258
610	Norway Maple	Acer platanoides	6		5	42.42244351	-71.16138334
611	Norway Maple	Acer platanoides	12		5	42.42245741	-71.16148122
612	Norway Maple	Acer platanoides	4		5	42.42250569	-71.16140776
613	Norway Maple	Acer platanoides	6		5	42.42252846	-71.1614577
614	Norway Maple	Acer platanoides	12		5	42.42256981	-71.16142634
615	Black Locust	Robinia pseudoacacia	12		5	42.42263676	-71.16138775
616	Norway Maple	Acer platanoides	10		5	42.42265495	-71.16145853
617	Norway Maple	Acer platanoides	8		5	42.42269529	-71.16137192
618	Norway Maple	Acer platanoides	12		5	42.42275408	-71.16145467
619	Norway Maple	Acer platanoides	6		5	42.42279115	-71.16141801
620	Norway Maple	Acer platanoides	10		5	42.42287534	-71.161354

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
621	Black Locust	Robinia pseudoacacia	12		5	42.42285716	-71.16128322
622	Norway Maple	Acer platanoides	12		5	42.4227902	-71.16132181
623	Norway Maple	Acer platanoides	6		5	42.42274885	-71.16135317
624	Norway Maple	Acer platanoides	4		5	42.42272608	-71.16130323
625	Norway Maple	Acer platanoides	8		5	42.42264468	-71.16128046
626	Black Locust	Robinia pseudoacacia	12		5	42.42258088	-71.16133924
627	Norway Maple	Acer platanoides	12		5	42.42257538	-71.16131264
628	Norway Maple	Acer platanoides	6		5	42.42252193	-71.16131533
629	Norway Maple	Acer platanoides	12		5	42.42248486	-71.16135198
630	Norway Maple	Acer platanoides	4		5	42.42241666	-71.16130021
631	Norway Maple	Acer platanoides	10		5	42.42251802	-71.1612478
632	Black Locust	Robinia pseudoacacia	12		5	42.42256306	-71.16126146
633	Norway Maple	Acer platanoides	8		5	42.42260884	-71.16121472
634	Norway Maple	Acer platanoides	9		5	42.42265338	-71.16118924
639	Black Locust	Robinia pseudoacacia	12		5	42.42278346	-71.16115693
640	Norway Maple	Acer platanoides	10		5	42.42273841	-71.16114327
641	Norway Maple	Acer platanoides	6		5	42.42274232	-71.1612108
642	Norway Maple	Acer platanoides	12		5	42.42279578	-71.16120811
643	Black Locust	Robinia pseudoacacia	12		5	42.42280128	-71.16123471
644	Norway Maple	Acer platanoides	12		5	42.4228389	-71.16117839
645	Norway Maple	Acer platanoides	8		5	42.42287256	-71.16122667
646	Norway Maple	Acer platanoides	6		5	42.42287663	-71.16113992
647	Black Locust	Robinia pseudoacacia	12		5	42.42292005	-71.16117518
648	Tree of Heaven	Ailanthus altissima	5		5	42.42292761	-71.16110172
649	Norway Maple	Acer platanoides	10		5	42.42297671	-71.16116868
650	Norway Maple	Acer platanoides	4		5	42.4229771	-71.16108831
651	Norway Maple	Acer platanoides	8		5	42.42282923	-71.16111019
652	Black Locust	Robinia pseudoacacia	12		5	42.42278544	-71.16103355
653	Norway Maple	Acer platanoides	9		5	42.42274497	-71.16106361
654	Norway Maple	Acer platanoides	10		5	42.42267071	-71.16107071
655	Norway Maple	Acer platanoides	10		5	42.42262171	-71.16113157
666	Black Locust	Robinia pseudoacacia	12		5	42.42256504	-71.16113808
667	Norway Maple	Acer platanoides	9		5	42.42252458	-71.16116814
668	Black Locust	Robinia pseudoacacia	12		5	42.42244358	-71.16120148
669	Norway Maple	Acer platanoides	12		5	42.42247083	-71.16114445
670	Black Locust	Robinia pseudoacacia	12		5	42.42248334	-71.16105432
671	Norway Maple	Acer platanoides	6		5	42.42252162	-71.16110282
672	Black Locust	Robinia pseudoacacia	12		5	42.42252558	-71.16102369
673	Norway Maple	Acer platanoides	7		5	42.42253007	-71.1609492
674	Tree of Heaven	Ailanthus altissima	5		5	42.4225726	-71.16106462
675	Norway Maple	Acer platanoides	4		5	42.42261318	-71.16099883
676	Norway Maple	Acer platanoides	4		5	42.42267111	-71.16099035
677	Norway Maple	Acer platanoides	6		5	42.42274201	-71.16099828
678	Black Locust	Robinia pseudoacacia	12		5	42.42274597	-71.16091916

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
679	Tree of Heaven	Ailanthus altissima	5		5	42.42279299	-71.16096008
680	Norway Maple	Acer platanoides	4		5	42.42284249	-71.16094667
681	Norway Maple	Acer platanoides	12		5	42.42289949	-71.16091821
682	Norway Maple	Acer platanoides	9		5	42.42291691	-71.16099796
683	Norway Maple	Acer platanoides	8		5	42.42296963	-71.16093869
684	Norway Maple	Acer platanoides	10		5	42.4228421	-71.16102704
685	Norway Maple	Acer platanoides	6		5	42.42307575	-71.16084181
686	Tree of Heaven	Ailanthus altissima	4		5	42.42286263	-71.1617491
687	Tree of Heaven	Ailanthus altissima	4		5	42.42287488	-71.16159695
688	Tree of Heaven	Ailanthus altissima	4		5	42.42289938	-71.16148353
689	Tree of Heaven	Ailanthus altissima	5		5	42.42296064	-71.16139225
690	Tree of Heaven	Ailanthus altissima	4		5	42.42303416	-71.16129543
691	Tree of Heaven	Ailanthus altissima	4		5	42.42310359	-71.16121797
692	Tree of Heaven	Ailanthus altissima	3		5	42.42318731	-71.16114605
693	Knotweed	Fallopia japonica	10		5	42.4233006	-71.1613745
694	Tree of Heaven	Ailanthus altissima	7		5	42.42345085	-71.16116308
695	Tree of Heaven	Ailanthus altissima	7		5	42.42356173	-71.1611309
696	Tree of Heaven	Ailanthus altissima	7		5	42.42365479	-71.16107725
697	Tree of Heaven	Ailanthus altissima	8		5	42.42367063	-71.16096996
698	Norway Maple	Acer platanoides	24		5	42.4240785	-71.16054886
699	Tree of Heaven	Ailanthus altissima	10		5	42.42409037	-71.16059982
700	Tree of Heaven	Ailanthus altissima	11		5	42.42412007	-71.160573
701	Tree of Heaven	Ailanthus altissima	12		5	42.42410819	-71.16062396
702	Tree of Heaven	Ailanthus altissima	10		5	42.42420521	-71.16053545
703	Norway Maple	Acer platanoides	16		5	42.42435766	-71.16039329
704	Tree of Heaven	Ailanthus altissima	20		5	42.42441508	-71.16034769
705	Tree of Heaven	Ailanthus altissima	30		5	42.42446062	-71.1603772
706	Boxelder	Acer negundo	4		5	42.42454625	-71.16035909
707	Tree of Heaven	Ailanthus altissima	4		5	42.42455318	-71.16034099
708	Boxelder	Acer negundo	4		5	42.42456605	-71.1603269
709	Tree of Heaven	Ailanthus altissima	4		5	42.42458189	-71.1603088
710	Tree of Heaven	Ailanthus altissima	4		5	42.42459555	-71.16028641
711	Tree of Heaven	Ailanthus altissima	4		5	42.4246099	-71.16026496
712	Boxelder	Acer negundo	4		5	42.42463861	-71.16022606
713	Tree of Heaven	Ailanthus altissima	3		5	42.42465445	-71.16020192
714	Tree of Heaven	Ailanthus altissima	3		5	42.42467573	-71.16017913
715	Tree of Heaven	Ailanthus altissima	3		5	42.42469306	-71.16016571
716	Norway Maple	Acer platanoides	5		5	42.42466534	-71.16013353
717	Norway Maple	Acer platanoides	5		5	42.42468761	-71.16010738
718	Tree of Heaven	Ailanthus altissima	4		5	42.42471781	-71.16013487
719	Tree of Heaven	Ailanthus altissima	3	Cluster	5	42.42474849	-71.16011207
720	Tree of Heaven	Ailanthus altissima	3		5	42.42476829	-71.16009732
721	Tree of Heaven	Ailanthus altissima	3		5	42.42478611	-71.16008122
722	Tree of Heaven	Ailanthus altissima	3		5	42.42478611	-71.16007452

Tree #	Common Name	Latin Name	DBH	Notes 1	Area	Latitude	Longitude
723	Boxelder	Acer negundo	6		5	42.42480294	-71.16006513
724	Tree of Heaven	Ailanthus altissima	3		5	42.42482076	-71.1600544
725	Tree of Heaven	Ailanthus altissima	3		5	42.42483165	-71.16003294
726	Tree of Heaven	Ailanthus altissima	5		5	42.42484353	-71.16001953
727	Tree of Heaven	Ailanthus altissima	3		5	42.42487026	-71.15999137

Total Tree Count 137

Area 5 - Shrub List

Shrub Bed #	Common	Latin	Area	Sq Ft
469	Knottweed	Fallopia japonica	5	712
470	Tree of Heaven	Ailanthus alitissima	5	1687
471	Tree of Heaven	Ailanthus alitissima	5	586
472	Boxelder	Acer negundo	5	302
473	Tree of Heaven	Ailanthus alitissima	5	1790
		Total Square Feet		5,077

Appendix C – Invasive Control Specifications

The following specifications are applicable for each year of invasive control for the Summer Street Woods CR surrounding Arlington 360, in Arlington, MA.

The site has been divided into five working Areas (Areas 1 – 5). The Areas have been delineated and defined on included ArcGIS maps. All references to these Areas are consistent with an inventory of invasive plants on the site.

Each area has been measured with approximate acreage and an inventory of approximate invasive plants for removal and treatment have been identified. The scope of work is to be defined by the Area delineation, not the plant count. If additional plants are present at the time of the invasive control, they should be considered for removal under these specifications.

Whitin each area, removal of all:

Norway Maple	*Acer platanoides*
Tree of Heaven	*Ailanthus altissima*
Black Locust	*Robina pseudoacacia*
Boxelder	*Acer negundo*
Buckthorn	*Rhamnus cathartica*
Wild Rose	*Rosa multiflora*
Knotweed	*Fallopia japonica*
Poison Ivy	*Toxicodendron radicans*

As well as any standing or fallen dead trees, as well as debris and brush piles will also be removed.

Specific plant maps and lists will be provided.

Trees are to be:

- Cut close to the ground.
- Wood and brush to be removed from the site, no dumping of chips on the site will be allowed.
- Where accessible the stumps are to be ground and the grindings removed from the site.
- Grinding holes are to be filled with loam.

- Where stumps a.re inaccessible to a stump grinder the stumps will be painted with a concentrated solution (20 percent) of glyphosate.

Shrubs are to be:

- Cut close to the ground.
- Wood and brush to be removed from the site, no dumping of chips on the site will be allowed.
- Cuts will be painted with a concentrated solution (20 percent) of glyphosate.
- Where possible, hand pulling of smaller plants is preferred.

Method of control of invasive shrubs:

Larger plants can be killed by cutting the shrub and painting the stump with a concentrated solution (20 percent) of glyphosate. Applying the herbicide directly to the cut stump using a foam paint brush will introduce the herbicide to the plant's root system and kill the plant. This method is a targeted application and avoids the need to spray and the associated overspray damage to desirable plants. Cutting and painting avoids unintended damage to desirable plants. Cutting and stump painting may need to be conducted over several seasons to fully eliminate some plants.

The selected vendor, or vendors, will be chosen from qualified bids submittals. The chosen vendor will be fully licensed and insured. They will be qualified to perform tree removal and land clearing operations. They shall provide all equipment necessary to perform the scope of services of this Plan. Location will determine the most appropriate method to remove invasive species. It is expected that a crane will be used in some instances. Other areas may will require tree climbers and felling operations. Specialty land-clearing equipment may also be used. The chosen vendor will determine which methods to employ that will result in minimal impact to the surrounding woodland.

Application of herbicides must be performed by a Massachusetts licensed pesticide applicator.

Appendix D – Planting Specifications

The following specifications are applicable for each year of restoration planting for the Summer Street Woods CR surrounding Arlington 360, in Arlington, MA.

The site has been divided into five working Areas (Areas 1 – 5). The Areas have been delineated and defined on included ArcGIS maps. All references to these Areas are consistent with the planting areas on the site. Final plant locations shall be determined and marked by the Consulting Arborist and Landscape Contractor prior to each installation season.

As stated in the Invasive Control Specifications, removal of plants in some areas will require access from previously cleared Areas. To achieve this "work-easements" through previous Areas will remain in place year-to-year. There will be no restoration planting on these easements. This will contain impact on the surrounded woodland to a narrow corridor. This has the additional benefit of potentially becoming a walking trails or some other forms of passive recreation use areas upon completion of the project.

SPECIFICATIONS

A. All trees must be nursery grown, freshly dug, balled and burlapped. Each tree must be tagged with the tree name (genus and species).

B. Tree caliper shall be determined at six (6) inches above the ground as the tree stands in its natural position. Correct depth of tree must show root flare 1" to 2" above the existing grade and have no exposed surface roots.

C. Trees shall be specimen quality with single-straight trunks and symmetrical well-branched crowns that are characteristic of the variety.

D. A list of planting locations will be provided to vendor prior to each planting season.

E. Eight ounces of a complete organic fertilizer should be inserted in the hole before planting and mixed thoroughly with subsoil before planting. Additionally, eight ounces of biochar must be deposited in the excavated area before planting each tree.

F. After planting the tree, the void shall be backfilled with a quality loam mixture approved by Consulting Arborist. Soil backfill mixture must be 92% quality,
screened loam and 8% compost mixture.

G. Each tree shall be inoculated with at least four ounces of mycorrhizal inoculant.

H. All trees shall be watered at the time of planting and backfilled with loam to keep the trees from tipping. At planting, a minimum of 10 gallons of water will be used to insure no air pockets in soil around root ball. The Contractor shall make all arrangements to apply approximately 15 gallons of potable water to each installed tree.

I. Water shall be applied in a manner that does not cause erosion. The interval of watering shall average once per week throughout the season. Trees fall shall be watered from April 1st to November 1st.

J. Stakes must be 8' in length at 45-degree angles with chain locks or arbor tie for support. Any broken branches from shipping or transplanting must be properly removed before the site. The planting site must be cleaned up of any dirt, debris or trash before leaving the site. All tags shall be removed from the tree at time of planting.

F. Stock furnished shall be 1.5 – 2" caliper for trees and 3 gal for shrubs. Stock may be larger than specified.

G. Bark mulch shall be shredded pine bark aged at least six months and not longer than two years. The mulch shall be dark brown in color, free of chunks and pieces of wood thicker than one-quarter (¼) inch. Mulch shall be free of stringy material over four inches in length, and free of chunks over three inches in width. It shall not contain an excess of fine particles.

H. Bark mulch shall be placed over entire planting area of individual trees to a depth of three inches. Bark mulch shall be held back from the base of all tree trunks a minimum of three (3) inches. The mulch shall be higher at the edges of the planting to hold water and moisture. Plants

must be mulched and staked at time of planting; mulch must be 3" inches deep.

I. Maintenance shall consist of keeping the trees in a healthy growing condition and shall include but not be limited to watering, removal of dead material, resetting trees proper to grades or upright position. Any decline in the condition of trees during the maintenance period shall require the Contractor to take immediate action to identify potential problems and undertake corrective measures. If required, Contractor shall engage professional Arborists and Horticulturalists to inspect plant materials and to identify problems and recommend corrective procedures. The owner's representative shall be immediately advised of such actions. The Contractor shall be responsible for arranging police details when necessary and will incur the cost thereof.

L. The Contractor shall be responsible for the preservation of all public and private property shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, the property shall be restored to the condition equal to that existing before the damage was done, at the Contractor's expense.

M. Contractor must stake trees and remove stakes at the end of one year's growing season.

N. ACCEPTANCE

Trees shall be accepted provided all requirements have been complied with and the trees are alive and in a healthy, vigorous condition. Final inspection of trees will be made at completion of planting.

O. WARRANTEE

Contractor hereby warrants that all trees will remain alive and in healthy, vigorous condition for a period of two (2) years after completion and acceptance of the entire project. Trees that die during the warranty period shall be removed immediately and replaced by the Contractor during the next planting season or as directed Consulting Arborist.

Warranty shall not include damage or loss of trees after planting caused by; fires, floods, winds more than seventy (70) miles per hour and acts of vandalism.

Appendix E – Assumptions and Limited Conditions

1. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
4. Unless required by law, otherwise, possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
5. Unless required by law, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant-particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualifications.
6. This report expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
7. Sketches, drawings, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by *Plant Healthcare Consultants, Inc.* as to the sufficiency or accuracy of said information.
8. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring unless otherwise specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Appendix F - Certification of Performance

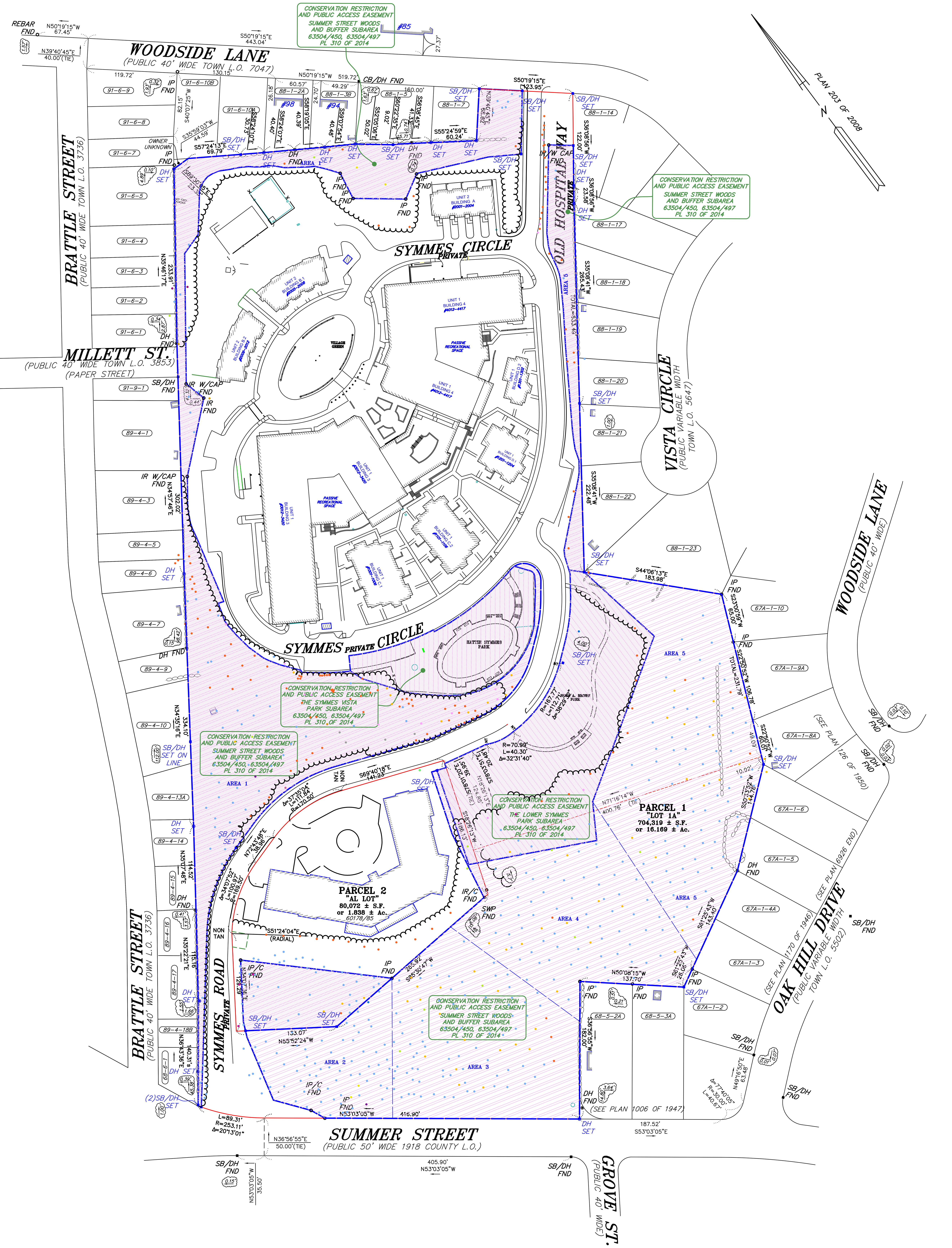
Plant Healthcare Consultants, Inc. certify that:

1. We have personally inspected the tree and property referred to in this report and have stated our findings accurately.
2. We have no current or prospective interest in the trees or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
3. The analysis, opinions and conclusions stated herein are our own and are based on current scientific procedures and facts.
4. Our analysis, opinions and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.
5. No one provided significant professional assistance to us, except as indicated within the report.
6. Our compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

We further certify that Plant Healthcare Consultants, Inc. is a member in good standing of the Massachusetts Arborist Association, American Society of Consulting Arborists, the International Society of Arboriculture and Massachusetts Tree Wardens and Foresters Association. We have been involved in the field of Arboriculture for over 30 years.

Daniel E. Cathcart

ASCA Registered Consulting Arborist® #766
ISA Board Certified Master Arborist® #TX-1357BM
ISA Certified Arborist Municipal Specialist®
ISA Tree Risk Assessment Qualified
Massachusetts Certified Arborist #41801
Massachusetts Qualified Tree Warden #1097



ABUTTERS

Map–Block–Lot	Owner Now/Formerly	Book–Page
091.0–0006–0010.A	Forest Martin & Naomi Muller	L.C. 1476–49
088.0–0001–0002.A	Thomas and Daniella Bodine	L.C. 1572–14
088.0–0001–0003.B	Barry Michele A	L.C. 1222–106
088.0–0001–0005.0	Lisa Lazarczyk	L.C. 1505–89
088.0–0001–0007.0	Whitfield John E Jr	L.C. 1131–46
088.0–0001–0014.0	68 Woodside Lane LLC	65383–183
088.0–0001–0017.0	Norberg Carl D	41548–536
088.0–0001–0018.0	Julia D Giolito Life Estate	63575–484
088.0–0001–0019.0	Cunha John A	25059–409
088.0–0001–0020.0	Agostino James J & Rosetta	57310–127
088.0–0001–0021.0	Mc Dermott John D	27027–301
088.0–0001–0022.0	Reichenbach Bodo A & Ingebo	28314–421
088.0–0001–0023.0	Michael Healey & Julie Ayotte	56188–144
068.0–0005–0002.A	Suelene & David Chu George	76518–361
068.0–0005–0003.A	Zoeller Karen F & Ralph A JR	40656–419
068.0–0006–0001.0	Morrison–Paglucia Gina	33236–107
089.0–0004–0018.B	Morrison Paul R	33236–107
089.0–0004–0017.0	Macdonald Ronald F	34079–217
089.0–0004–0016.0	Macdonald Ronald F	34079–217
089.0–0004–0015.0	Driscoll Susan L	49847–98
089.0–0004–0014.0	Petzold Kathryn etal	74603–477
089.0–0004–0013.A	Ford Polly & Aaron	62205–114
089.0–0004–0010.0	Tsomo Nawang	80254–296
089.0–0004–0009.0	Vasic Aleksandar & Jelena	73671–349
089.0–0004–0007.0	Copithorne Arthur W	29626–409
089.0–0004–0006.0	Byrd Matthew & Mary Katherine	74331–201
089.0–0004–0005.0	Baghdadi Reza	79044–472
089.0–0004–0003.0	Maltby Laura L	78914–412
089.0–0004–0001.0	Jurgensen Peter & Mariza	24854–74
091.0–0009–0001.0	Lusk Sarah L/Trustee	70776–54
091.0–0006–0001.0	Doherty Donald J Jr	19682–481
091.0–0006–0002.0	Doherty Donald J Jr	19682–481
091.0–0006–0003.0	Flesch William	42298–42
091.0–0006–0004.0	Dalton Joseph W/Cara N	39607–393
091.0–0006–0005.0	Fitzpatrick Joseph M	49968–166
091.0–0006–0007.0	Moldovan Richard J & Itano Andrea	66204–335
091.0–0006–0008.0	Moldovan Richard J & Itano Andrea	66204–335
091.0–0006–0009.0	Ciampa Marco A/Glenda L	L.C. 1265–15
091.0–0006–0010.A	Forest Martin & Muller Naomi	1476–49
091.0–0006–0010.B	Libby Timothy S & DIPAOLO Lisa	1422–47
067.A–0001–0010.0	Wilson Timothy D––etal	73478–114
067.A–0001–0009.A	Schiffer Lauren, Asmussen Erik	74015–125
067.A–0001–0008.A	Miller Stephan––etal	54545–435
067.A–0001–0007.A	Fichera Gaetano J & Shelly A	51454–388
067.A–0001–0006.0	Delbanco Thomas/Jill	31847–96
067.A–0001–0005.0	Ranere Gerard A & Lois D	14636–555
067.A–0001–0004.A	Brown James S & Phyllis M	79814–574
067.A–0001–0003.0	Yudowski Guillermo & Gleiser Julieta	69829–259
067.A–0001–0002.0	Warrington David R––etal	23925–73

LEGEND

Symbol	Description
OHW	OVERHEAD WIRE
LP	LIGHT POLE
UP	UTILITY POLE
GW	GUY WIRE
OHW	OVERHEAD WIRE
LP	LIGHT POLE
UP	UTILITY POLE
GW	GUY WIRE
S	SIGN
B	BOLLARD
P	POST
HH	HAND HOLE
"A"HH	TOWN OF ARLINGTON–HAND HOLE
"MH"HH	MASS HIGHWAY HAND HOLE
CLF	CHAIN LINK FENCE
WF	WOOD FENCE
	GUARDRAIL/GUIDERAIL
CC	CONCRETE CURB
GC	GRANITE CURB
BCB	BITUMINOUS CONCRETE BERM
	PROPERTY BOUNDARY LINE
	STONE WALL
	TREE
	TREE (See Note 4)
	TREE LINE
	CONSERVATION RESTRICTION
	BUILDING
BIT CONC	BITUMINOUS CONCRETE
CONC	CONCRETE
EM	ELECTRIC METER
EOP	EDGE OF PAVEMENT
HC	HANDICAP RAMP
HW	HEAD WALL
TRANSF	ELECTRIC TRANSFORMER
TS	TRAFFIC SIGNAL
SB	STONE BOUND
SB	STONE BOUND–2023
SWP	STONE WITNESS POST (NOTE 5)
DH	DRILL HOLE
DH	DRILL HOLE–2023
IP	IRON PIN/IRON PIPE
IP	IRON PIN/IRON PIPE–2023
FND	FOUND
67A–1–10	ASSESSOR'S' MAP, BLOCK AND LOT NUMBERS

TREE LEGEND

COMMON NAME–SEE NOTE 4

- BLACK LOCUST
- BOXELDER
- BLACK LOCUST
- KNOTTWEED
- NORWAY MAPLE
- POISON IVY
- TREE OF HEAVEN
- WILD ROSE
- BLACK CHERRY/OTHER
- BLACK OAK/OTHER
- RED OAK/OTHER
- SHAGBARK HICKORY/OTHER
- WHITE OAK/OTHER

CONSERVATION RESTRICTION AND PUBLIC ACCESS EASEMENT
DEED BOOK 63504/450, 63504/497, PLAN 310 OF 2014

NOTES

1) UNDERGROUND AND SURFACE UTILITIES ARE NOT SHOWN. BEFORE CONSTRUCTION CALL "DIG SAFE" 1–888–344–7233.

2) THIS PLAN IS WAS PREPARED FROM AN ACTUAL SURVEY MADE ON THE GROUND USING A ZEISS ELTA TOTAL STATION AND TRIMBLE S6 TOTAL STATION BETWEEN APRIL 28, 2011 AND SEPTEMBER 12, 2023.

3) PROPERTY LINE SOLUTION REFERENCES A PLAN ENTITLED "PLAN OF LAND, SYMMES HOSPITAL ARLINGTON, MASSACHUSETTS..." DATED JANUARY 29, 2008, LAST REVISED MARCH 29, 2008 AND PREPARED BY BEALS AND THOMAS, INC.

4) COLORED TREES DEPICTED IN AREAS 1–5 ARE REFERENCED IN THE "FOREST RESTORATION AND INVASIVE SPECIES MITIGATION MANAGEMENT PLAN, SUMMER STREET WOODS CR/ARLINGTON 360" PREPARED BY PLANT HEALTHCARE CONSULTANTS, INC., 134 ALLEN STREET, BRAINTREE, MA 02184. TREE LOCATIONS WERE PROVIDED AS ELECTRONIC .SHP FILES ON SEPTEMBER 29, 2023.

5) THE SITE CONTAINS STONE MARKERS THAT WERE PREVIOUSLY SET TO DESIGNATE THE PROXIMITY OF THE CONSERVATION RESTRICTIONS. ONLY A FEW HAVE BEEN LOCATED AND SHOWN ON THIS PLAN.

6) EASEMENTS OF RECORD ARE NOT SHOWN.

7) MONUMENT SUMMARY:
   26 EXTERIOR MONUMENTS SET AND 15 RECOVERED: 41
   6 INTERIOR MONUMENTS SET AND 12 RECOVERED: 18
   TOTAL PERIMETER/INTERIOR CONSERVATION RESTRICTION MONUMENTS: 59

NOTES:
SEE SHEETS 2 AND 3 FOR DETAIL.

PREPARED FOR:
FHF I ARLINGTON 360, LLC
C/O TA REALTY
28 STATE STREET
10TH FLOOR
BOSTON, MA 02109
C/O GREYSTAR
ONE FEDERAL STREET
SUITE 1804
BOSTON, MA 02110

RECORD OWNER:
FHF 1 ARLINGTON 360 LLC
DEED BOOK 65951 PAGE 297

ASSESSORS PARCEL
88–1–13

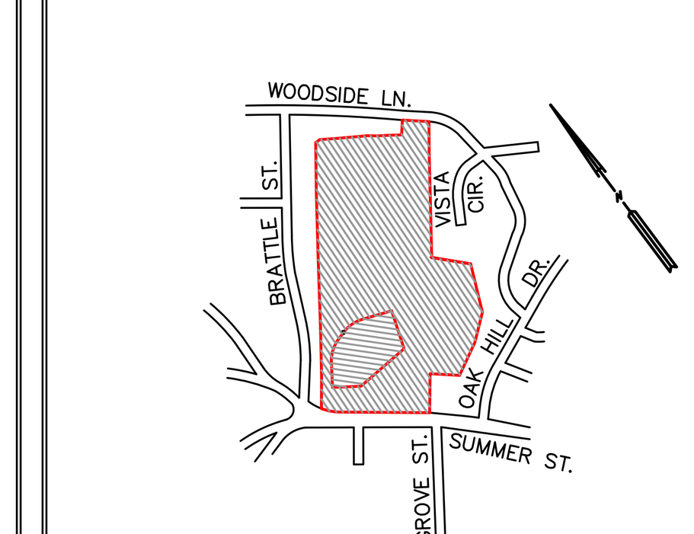
BRIGHTVIEW ARLINGTON LLC
DEED BOOK 60178 PAGE 85

ASSESSORS PARCEL
88–1–13A

COMMONWEALTH OF MASSACHUSETTS
KIRK E. AUBUCHONT
No. 51966
REGISTERED PROFESSIONAL LAND SURVEYOR
Kirk E. Aubuchont
10/04/2023

5		
4		
3		
2		
1		
0	10/04/2023	INITIAL ISSUE
	ISSUE DATE	DESCRIPTION

SAS	KEA	SJC	KEA
FLD	CALC	DWN	CHK'D



CONSERVATION RESTRICTION PLAN (OVERALL BOUNDARY)

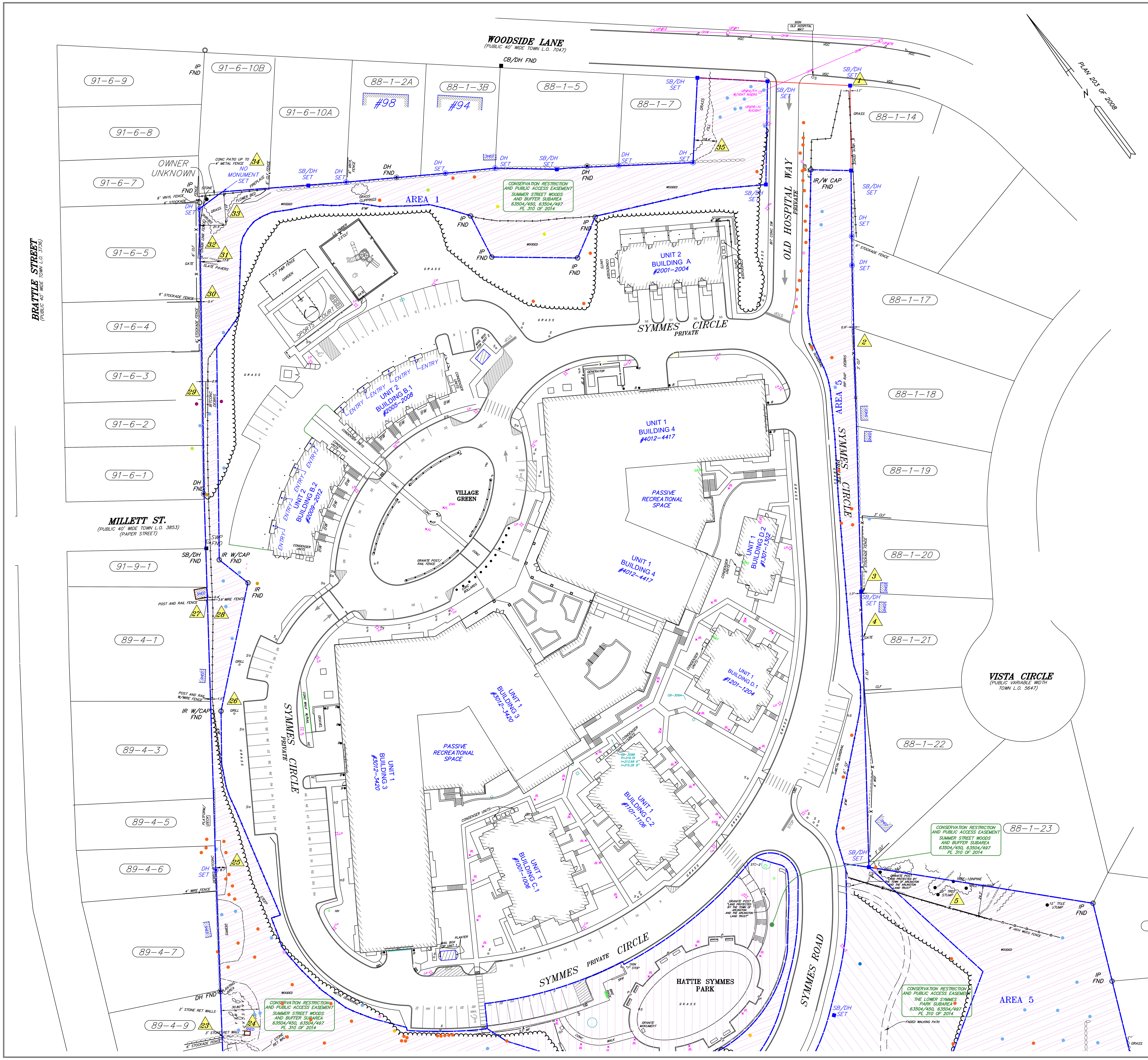
ARLINGTON 360
4105 SYMMES CIRCLE
ARLINGTON, MA
(MIDDLESEX COUNTY)

PREPARED BY:
BEALS AND THOMAS

BEALS AND THOMAS, INC.
144 Turnpike Road, Suite 210
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

DATE: OCTOBER 4, 2023
SCALE: 1"=60'
METERS 0 10 25 50
FEET 0 30 60 120 180

BTI JOB NO. 2028.27
BTI PLAN NO. 202827P135A–001
SHEET 1 OF 3
CR–1



OBSERVATIONS

KEY	DESCRIPTION
1	A PORTION OF THE FENCE, NOW OR FORMERLY OF 68 WOODSIDE LANE LLC, ENCROACHES APPROXIMATELY 1.1', ALONG THE NORTHEASTERLY PORTION OF THE PREMISES.
2	A FENCE CROSSES ONTO THE PREMISES BY APPROXIMATELY 0.9' FROM LAND NOW OR FORMERLY OF NORBERG AND OF JULIA D GIOLITO LIFE ESTATE.
3	A FENCE CROSSES ONTO THE PREMISES BY APPROXIMATELY 1.0' FROM LAND NOW OR FORMERLY OF MCDERMOTT.
4	THERE IS A GATE ALONG LAND NOW OR FORMERLY OF MCDERMOTT ONTO LOCUS.
5	VARIOUS LANDSCAPING, TREES AND WALLS FROM FROM LAND NOW OR FORMERLY OF ZOELLER ENCROACH ONTO THE PREMISES UP TO A DISTANCE OF 24.3'.
6	MAINTAINED LAWN AND SHRUBS APPEARS TO ENCROACH ONTO THE PREMISES BY APPROXIMATELY 7.8' FROM THE LAND NOW OR FORMERLY OF SCHIFFER AND ASMUSSEN.
7	A FENCE APPEARS TO ENCROACH ONTO THE PREMISES BY APPROXIMATELY 3.6' FROM LAND NOW OR FORMERLY OF MILLER.
8	A WOOD RETAINING WALL AND LANDSCAPING APPEARS TO ENCROACH ONTO THE PREMISES BY APPROXIMATELY 2.9' AND 30.1' FROM LAND NOW OR FORMERLY OF RANERE.
9	LANDSCAPING FROM FROM LAND NOW OR FORMERLY OF RANERE APPEARS TO ENCROACH ONTO THE PREMISES BY APPROXIMATELY 30.1'.
10	EVIDENCE OF A PATH AND RETAINING WALL, FROM LAND NOW OR FORMERLY OF BROWN, ONTO LOCUS BY ABOUT 25.7'.
11	DEBRIS PILE FROM FROM LAND NOW OR FORMERLY OF ZOELLER APPEARS TO ENCROACH ONTO THE PREMISES APPROXIMATELY 10'.
12	AN UNDERGROUND GAS LINE CROSSES ONTO THE PREMISES FROM LAND NOW OR FORMERLY OF GEORGE.
13	A GUY WIRE CROSSES ONTO THE PREMISES FROM UTILITY POLE #883/113 ACROSS SUMMER STREET.
14	CONCRETE SIDEWALK, APPEARS TO ENCROACH ONTO LOCUS BY ABOUT 0.3'.
15	AN OVERHEAD WIRE CROSSES ONTO THE PREMISES FROM UTILITY POLE #29/33 ACROSS SUMMER STREET.
16	VARIOUS TRAFFIC SIGNAL POSTS ARE LOCATED ON THE PREMISES NEAR SUMMER STREET.
17	FOUR SEPARATE PVC PIPES FROM LAND NOW OR FORMERLY OF MACDONALD APPEARS TO ENCROACH ONTO THE PREMISES UP TO A DISTANCE OF 6.6'.
18	A CONCRETE AND STONE WALL APPEAR TO ENCROACH ONTO THE PREMISES FROM LAND NOW OR FORMERLY OF DRISCOLL BY ABOUT 0.7'.
19	A 5' HIGH FENCE CONTAINING A PORTION OF A WOODEN DECK, A SHED, LANDSCAPING, GRAVEL AND STONE WALLS, FROM LAND NOW OR FORMERLY OF PETZOLD, APPEAR TO ENCROACH ONTO THE PREMISES, UP TO A DISTANCE OF 23.0'.
20	A PORTION OF A 5' FENCE BY LAND NOW OR FORMERLY OF FORD, APPEARS TO ENCROACH ONTO THE PREMISES BY ABOUT 15.9' .
21	A SHED BY LAND NOW OR FORMERLY OF TSOMO, APPEARS TO ENCROACH ONTO THE PREMISES BY ABOUT 37.0'.
22	MAINTAINED LAWN, LANDSCAPING, PATIO, SHED AND FENCE DEBRIS, FROM LAND NOW OR FORMERLY OF TSOMO, APPEARS TO ENCROACH ONTO THE PREMISES, UP TO A DISTANCE OF 41.1'
23	A PORTION OF A STOCKADE FENCE APPEARS TO ENCROACH ONTO THE PREMISES BY ABOUT 1.4' BY LAND NOW OR FORMERLY OF VASIC.
24	A LANDSCAPED AREA BY LAND NOW OR FORMERLY OF VASIC, APPEARS TO ENCROACH ONTO THE PREMISES BY APPROXIMATELY 31.5'.
25	DEBRIS PILE OF BITUMINOUS CONCRETE, EXTENDING FROM LANDS NOW OR FORMERLY OF BAGHDADI, OF BYRD AND OF COPITHORNE, APPEARS TO ENCROACH ONTO THE PREMISES APPROXIMATELY 8.7'.
26	A PORTION OF A POST AND RAIL FENCE APPEARS TO ENCROACH ONTO THE PREMISES BY ABOUT 1.0' BY LAND NOW OR FORMERLY OF JURGENSEN.
27	A PORTION OF SHED NOW OR FORMERLY OF JURGENSEN APPEARS TO ENCROACH ONTO LOCUS ALONG THE WESTERLY PORTION OF THE PREMISES BY ABOUT 0.4'.
28	A PORTION OF A WIRE FENCE, EXTENDING FROM LAND, NOW OR FORMERLY, OF JURGENSEN APPEARS TO ENCROACH ONTO LOCUS BY ABOUT 3.6'.
29	AN AREA OF BITUMINOUS CONCRETE PAVEMENT, APPEARS TO ENCROACH ONTO LOCUS FROM LANDS NOW OR FORMERLY, OF DOHERTY AND OF FLESCH, ABOUT 2.9'.
30	A STOCKADE FENCE CROSSES ONTO THE PREMISES BY APPROXIMATELY 0.4' FROM LAND NOW OR FORMERLY OF DALTON.
31	AN AREA OF SLATE PAVING FROM A GATE, FROM LAND NOW OR FORMERLY OF FITZPATRICK, APPEARS TO ENCROACH ONTO LOCUS BY ABOUT 17.6'.
32	VARIOUS LANDSCAPING, FENCES, PLANTINGS AND WALLS FROM LANDS, NOW OR FORMERLY, OF FITZPATRICK AND OF OWNER UNKNOWN, APPEARS TO ENCROACH ONTO THE PREMISES UP TO A DISTANCE OF 21.5'.
33	VARIOUS LANDSCAPING, FENCES, PLANTINGS AND WALLS FROM LANDS, NOW OR FORMERLY, OF LIBBY AND DIPAOLO AND OF OWNER UNKNOWN, APPEARS TO ENCROACH ONTO THE PREMISES UP TO A DISTANCE OF 27.1'.
34	CONCRETE PATIO APPEARS TO ENCROACH ONTO THE PREMISES FROM LAND NOW OR FORMERLY OF LIBBY AND DIPAOLO UP TO A DISTANCE OF 2'.
35	AN AREA OF MAINTAINED LAWN, FROM LAND NOW OR FORMERLY, OF WHITFIELD, APPEARS TO ENCROACH ONTO LOCUS BY ABOUT 18.4'.

PARCEL 1
"LOT 1A"
704,319 ± S.F.
or 16.169 ± Ac.

A360 PRIMARY CONDOMINIUM
63361/49, 63361/93
63361/138, 63909/260

A360 TOWNHOMES CONDOMINIUM
63361/144, 63361/180
63361/224, 63889/131

TREE LEGEND

COMMON NAME–SEE NOTE 4
BLACK LOCUST
BOXELDER
BLACK LOCUST
KNOTTWEED
NORWAY MAPLE
POISON IVY
TREE OF HEAVEN
WILD ROSE
BLACK CHERRY/OTHER
BLACK OAK/OTHER
RED OAK/OTHER
SHAGBARK HICKORY/OTHER
WHITE OAK/OTHER

NOTES:
SEE SHEET 1 FOR PROPERTY LINE DIMENSIONS, NOTES, REFERENCES AND LEGEND.

PREPARED FOR:
FHF I ARLINGTON 360, LLC
C/O TA REALTY
28 STATE STREET
10TH FLOOR
BOSTON, MA 02109
C/O GREYSTAR
ONE FEDERAL STREET
SUITE 1804
BOSTON, MA 02110

RECORD OWNER:
FHF 1 ARLINGTON 360 LLC
DEED BOOK 65951 PAGE 297

ASSESSORS PARCEL
88–1–13

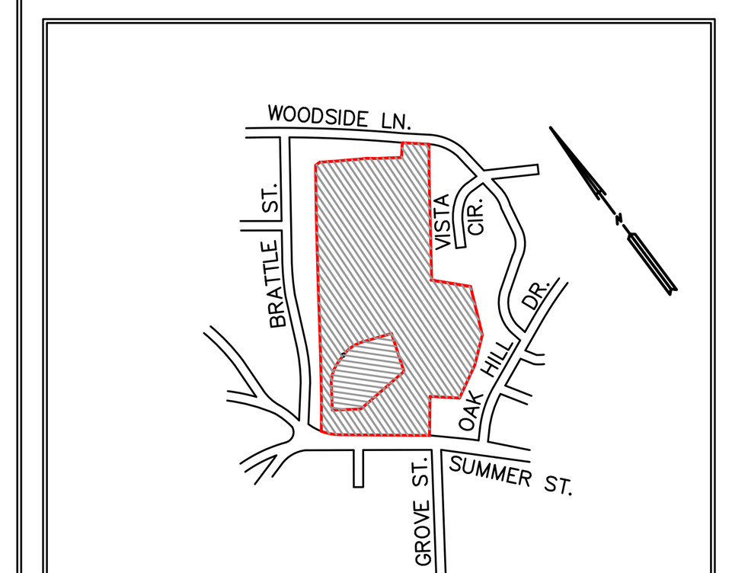
BRIGHTVIEW ARLINGTON LLC
DEED BOOK 60178 PAGE 85

ASSESSORS PARCEL
88–1–13A

COMMONWEALTH OF MASSACHUSETTS KIRK E. AUBUCHONT No. 51966 REGISTERED PROFESSIONAL LAND SURVEYOR
Kirk E. Aubuchont
10/04/2023

	ISSUE DATE	DESCRIPTION
5		
4		
3		
2		
1		
0	10/04/2023	INITIAL ISSUE

SAS	KEA	SJC	KEA
FLD	CALC	DWN	CHK'D



CONSERVATION RESTRICTION PLAN (DETAIL - NORTH)

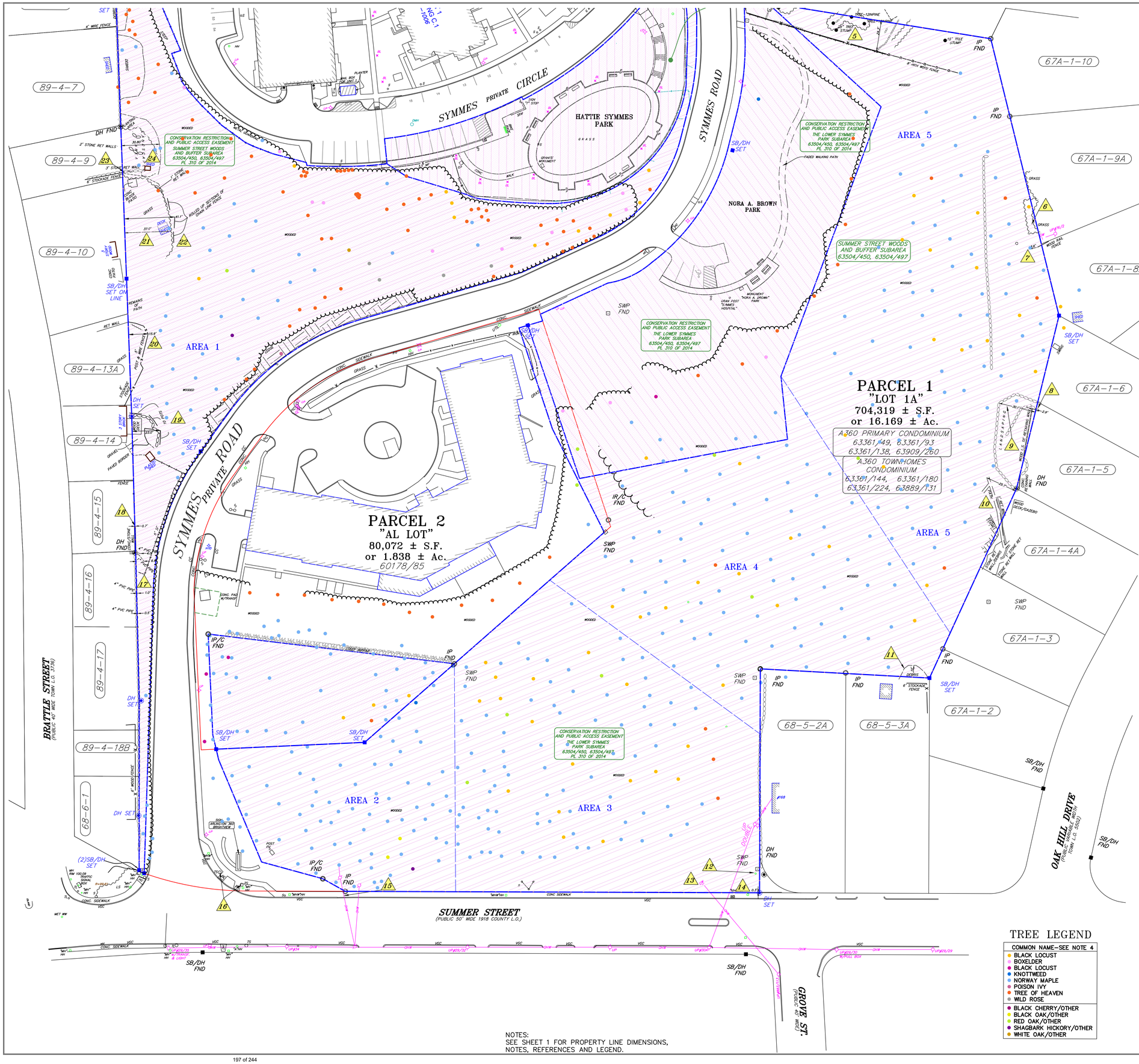
ARLINGTON 360
4105 SYMMES CIRCLE
ARLINGTON, MA
(MIDDLESEX COUNTY)

PREPARED BY:
BEALS AND THOMAS

BEALS AND THOMAS, INC.
144 Turnpike Road, Suite 210
Southborough, Massachusetts 01772-2104
T 508.366.0560 | www.bealsandthomas.com

DATE: OCTOBER 4, 2023
SCALE: 1"=30'
METERS 0 5 10 25
FEET 0 15 30 60 90

BTI JOB NO. 2028.27
BTI PLAN NO. 202827P135A–002
CR–2
SHEET 2 OF 3



NOTES:
SEE SHEET 1 FOR PROPERTY LINE DIMENSIONS, NOTES, REFERENCES AND LEGEND.

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BOXELDER
BLACK LOCUST
KNOTTWEED
NORWAY MAPLE
POISON IVY
TREE OF HEAVEN
WILD ROSE
BLACK CHERRY/OTHER
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PREPARED FOR:
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DEED BOOK 65951 PAGE 297

ASSESSORS PARCEL
88-1-13
BRIGHTVIEW ARLINGTON LLC
DEED BOOK 60178 PAGE 85

ASSESSORS PARCEL
88-1-13A

COMMONWEALTH OF MASSACHUSETTS
KIRK E. AUBUCHON
No. 51366
REGISTERED PROFESSIONAL LAND SURVEYOR
Kirk E. Aubuchon
10/04/2023

5			
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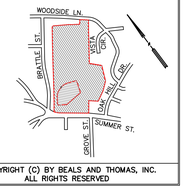

CONSERVATION RESTRICTION PLAN (DETAIL - SOUTH)

ARLINGTON 360
4105 SYMMES CIRCLE
ARLINGTON, MA
(MIDDLESEX COUNTY)

PREPARED BY:

BEALS AND THOMAS
BEALS AND THOMAS, INC.
144 Turnpike Road, Suite 210
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DATE: OCTOBER 4, 2023
METERS 0 5 10 25
FEET 0 15 30 60 90
SCALE: 1"=30'

BTI JOB NO. 2028.27
BTI PLAN NO. 202827P135A-003
SHEET 3 OF 3

CR-3

Town of Arlington, Massachusetts

Zoning and Ownership of Town-owned Properties.

Summary:
Zoning and Ownership of Town-owned Properties.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Property_Transfer_and_Rezoning_Memo.pdf	Property Transfer and Rezoning Memo.pdf
🗋	Reference Material	Property_Transfers.xlsx	Property Transfers.xlsx
🗋	Reference Material	Rezoning.xlsx	Rezoning.xlsx

Spring Warrant Articles

David Morgan <dmorgan@town.arlington.ma.us>

Thu 10/5/2023 3:42 PM

To:Joe Connelly <jconnelly@town.arlington.ma.us>
Cc:Claire Ricker <cricker@town.arlington.ma.us>

2 attachments (27 KB)

Property Transfers.xlsx; Rezoning.xlsx;

Hi Joe,
Claire and I have been talking about a couple administrative changes to open spaces in town. These might make their way to Town Meeting, or maybe we can act on them without needing a vote. First, there are about 12 acres of Town properties that are owned/managed by what seems like the wrong entity for the current use. I'd like to move half into ConCom and the other half into Recreation's wheelhouse. Take a look at the Property Transfers spreadsheet and see what you think.

Similarly, a lot of open spaces in town aren't zoned as such. My go-to example is that the cemetery is zoned for single family, but clearly nobody's trying to live there. There are about 40 more parcels in a similar situation. These include the bikeway, parks, playgrounds, conservation areas, and historic sites. You'll find the list in the Rezoning spreadsheet attached.

If you're on board, I'd be happy to move these forward. Let me know if you want more info or want to meet and discuss.

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

Parcel_ID	Site Name	Owner	Manager	Level of Protection	Article 97	Conservation Restriction	GIS_Acres	Change
063.0-0004-0004.A	Cooke's Hollow Park	Town of Arlington	Conservation Commission	Perpetuity	Yes	No	0.55	Town > ConCom
051.0-0003-0002.B	Water Street Conservation Area	Town of Arlington Conservation Commission	Conservation Commission	Perpetuity	Yes	No	0.05	ConCom > Rec
027.0-0003-0021.0	Crosby Playground/ Tennis Court	Town of Arlington		Perpetuity	Yes	No	1.43	Town > Rec
027.0-0003-0020.0	Crosby Playground/ Tennis Court	Town of Arlington		Perpetuity	Yes	No	0.62	Town > Rec
159.0-0004-0011.0	Florence Avenue Park	Town of Arlington	Park and Recreation	Perpetuity	Yes	No	3.88	Town > Rec
130.0-0001-0026.A	Parmenter School Playground	Town of Arlington	Park and Recreation	None	No	No	0.41	Town > Rec
N/A	Mill Brook Conservation Area (Lexington)	Town of Arlington		Perpetuity	Yes	No	2.89	Town > ConCom
149.0-0002-0008.0	Robbins Road Open Area	Town of Arlington	Select Board	None	No	No	0.09	Town > ConCom
052.0-0002-0004.B	Mill Brook Open Area	Town of Arlington Park & Recreation Commission	Park and Recreation	Limited	No	No	0.59	Rec > ConCom
015.0-0001-0005.0	Paper Road off Minuteman Bikeway	Town of Arlington Park & Recreation Commission	Park and Recreation	Limited	No	No	1.87	Rec > ConCom
N/A	Arlington Great Meadows	Town of Arlington	Select Board	Limited	No	No	N/A	Town > ConCom

Parcel_ID	SiteName
108.0-0002-0020.0	Forest Street Conservation Area
015.0-0001-0005.0	Paper Road off Minuteman Bikeway
ROW/BIKEWAY	Minuteman Bikeway
062.0-0001-0003.0	Corner of Mass Ave / Drake Rd
165.0-0006-0004.0	Foot of the Rock
058.0-0007-0008.0	Mill Lane Conservation Area
ROW/BIKEWAY	Minuteman Bikeway
056.0-0002-0038.0	MWRA Orchard
ROW/BIKEWAY	Minuteman Bikeway
ROW/BIKEWAY	Minuteman Bikeway
054.0-0001-0001.0	Wellington Park
075.0-0002-0012.0	Medford Boat Club
052.0-0002-0004.B	Mill Brook Open Area
124.0-0001-0006.0	Jason Russell House
ROW/BIKEWAY	Minuteman Bikeway
ROW/BIKEWAY	Minuteman Bikeway
050.0-0001-0001.C	Buzzell Field Access Path
063.0-0004-0004.A	Cooke's Hollow Park
049.0-0001-0019.B	Mt. Pleasant Cemetery
046.0-0001-0012.0	Mt. Pleasant Cemetery
032.0-0001-0001.0	Monument Park
049.0-0001-0021.0	Mt. Pleasant Cemetery
ROW/BIKEWAY	Minuteman Bikeway
009.0-0002-0002.A	Spy Pond Park
011.0-0001-0003.0	The Old Burying Ground Cemetery
024.0-0003-0001.0	St. Paul's Cemetery
035.0-0004-0013.0	Prince Hall Mystic Cemetery
034.0-0005-0001.0	Alewife Brook Reservation
024.0-0002-0006.0	Waldo Park
027.0-0003-0021.0	Crosby Playground / Tennis Court
005.0-0002-0001.0	Hardy School Playground
029.0-0001-0008.0	Gibbs School Playground
005.0-0002-0001.0	Hardy School Playground
122.0-0007-0001.0	Elizabeth Island
014.0-0002-0006.0	Thorndike Field
013.0-0012-0005.A	Mugar
050.0-0007-0001.0	Uncle Sam Monument
088.0-0001-0013.0	Symmes Woods: Summer Street Woods CR
049.0-0001-0019.B	Mt. Pleasant Cemetery
050.0-0008-0001.B	Jefferson Cutter House & Whittemore Park

Owner	Manager	ZoneAbbr
Town of Arlington Conservation Commission	Conservation Commission	R1
Town of Arlington Park	Parks and Recreation Department	R2
Massachusetts Bay Transit Authority	State	B4
Town of Arlington Park	Parks and Recreation Department	B1
Town of Arlington Park	Parks and Recreation Department	B2
Town of Arlington	Town Manager Office	R7
Massachusetts Bay Transit Authority	State	I
Massachusetts DCR	State	R2
Massachusetts Bay Transit Authority	State	I
Massachusetts Bay Transit Authority	State	R5
Town of Arlington Park	Parks and Recreation Department	I
Medford Boat Club	State	R0
Town of Arlington	Parks and Recreation Department	R1
Arlington Historical Society	Private	R2
Massachusetts Bay Transit Authority	State	R2
Massachusetts Bay Transit Authority	State	R7
Town of Arlington Park	Parks and Recreation Department	R6
Town of Arlington	Conservation Commission	R1
Town of Arlington	Cemetery	R2
Town of Arlington	Cemetery	I
Town of Arlington Park	Parks and Recreation Department	R1
Town of Arlington	Cemetery	R1
Massachusetts Bay Transit Authority	State	B5
Town of Arlington Park	Parks and Recreation Department	R2
Town of Arlington	Cemetery	R1
Catholic Cemetery Association	Private	B4
MASONIC GRAND LODGE CORP	Private	R1
Massachusetts DCR	State	R2
Town of Arlington Park	Parks and Recreation Department	R1
Town of Arlington		R1
Town of Arlington School Department	School Department	R2
Town of Arlington School Department	School Department	R1
Town of Arlington School Department	School Department	R1
Arlington Land Trust	Private	R1
Town of Arlington Park	Parks and Recreation Department	PUD
Mugar Enterprises LLC	Private	R2
Town Of Arlington Selectmen	Public Works	B5
Arlington 360 LLC	Private	MU
Town of Arlington	Cemetery	R1
Town of Arlington Redevelopment Board		R1

ZoneName	Rezone
Single Family	OS
Two Family	OS
Vehicular Oriented Business	T
Neighborhood Office	OS
Neighborhood Business	OS
Apartments High Density	OS
Industrial	T
Two Family	OS
Industrial	T
Apartments Low Density	T
Industrial	OS
Large Lot Single Family	
Single Family	OS
Two Family	OS
Two Family	T
Apartments High Density	T
Apartments Med Density	OS
Single Family	OS
Two Family	OS
Industrial	OS
Single Family	OS
Single Family	OS
Central Business	T
Two Family	OS
Single Family	OS
Vehicular Oriented Business	OS
Single Family	OS
Two Family	OS
Single Family	OS
Single Family	OS
Two Family	OS
Single Family	OS
Single Family	OS
Single Family	OS
Planned Unit Development	OS
Two Family	?
Central Business	OS
Multi-Use	OS
Single Family	OS
Single Family	OS

Town of Arlington, Massachusetts

Notice of Intent: Thorndike Place (Continuation from 10/19/23).

Summary:
Notice of Intent: Thorndike Place (Continuation from 10/19/23).

The Conservation Commission will hold a public hearing under the Wetlands Protection Act to consider a Notice of Intent for the construction of Thorndike Place, a multifamily development on Dorothy Road in Arlington. This hearing will concern the Conservation Commission's request for peer review of submitted materials. This hearing will include an update on progress regarding wildlife habitat and stormwater peer review.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	Thorndike_Place_-_Peer_Review_Solicitation.pdf	Thorndike Place - Peer Review Solicitation.pdf
🗋	Reference Material	Thorndike_Place_Stormwater_Peer_Review_Proposal_-_Hatch.pdf	Thorndike Place Stormwater Peer Review Proposal - Hatch.pdf
🗋	Reference Material	Thorndike_Place_Stormwater_Peer_Review_Proposal_-_Kleinfelder.pdf	Thorndike Place Stormwater Peer Review Proposal - Kleinfelder.pdf
🗋	Reference Material	Thorndike_Place_Stormwater_Peer_Review_Proposal_-_W_S.pdf	Thorndike Place Stormwater Peer Review Proposal - W&S.pdf

Thorndike Place Peer Review

I'm writing to inquire about your availability to conduct a peer review of certain portions of a Notice of Intent application under consideration by Arlington's Conservation Commission. Please let me know if you are able to take on the scope of work described below, and if so, please provide a timeline and cost estimate.

Thorndike Place is a proposed multifamily development in east Arlington along Route 2. The subject site contains Bordering Vegetated Wetland, Buffer Zone to BVW, and Bordering Land Subject to Flooding. The application is being considered under the Wetlands Protection Act (WPA) only because it has already received a Comprehensive Permit under 40B regulations. The BSC Group is working on behalf of the applicant, Arlington Land Realty, LLC of Boston; Oaktree Development is also involved in the proposed project.

Stormwater Review

The Conservation Commission is seeking peer review of the Stormwater Report and Management Plan associated with the Thorndike Place development to determine whether it complies with the Massachusetts Stormwater Standards. For reference, the associated materials can be found here. The scope of work should include background and document review, a memorandum or letter to the Commission containing your conclusions and recommendations following this review, a review of the applicant's team's response to your initial memorandum, a written reply to the Commission addressing the applicant's response, a site visit, attendance at two Conservation Commission public hearings (held via Zoom). The Town will facilitate communication with the applicant and provide additional information as needed.

If you are available and interested, please submit your proposal by noon on Tuesday, October 31st.

Habitat Review

The Conservation Commission is seeking peer review of the Thorndike Place Planting Plan, contained in the Notice of Intent, for compliance with the performance standards for restoration work in Bordering Land Subject to Flooding (BLSF) and standards for work in the Buffer Zone to Bordering Vegetative Wetland (BVW). The Commission not only wishes to know whether the plan is designed to succeed also wishes to know whether the plan will enhance wildlife habitat characteristics as detailed in 310 CMR 10.60; the applicant has agreed that such a standard should be the goal, even if that performance standard does not strictly apply. The scope of work should include background and document review, of the relevant documents, a memorandum or letter to the Commission containing your conclusions and recommendations following this review, a review of the applicant's team's response to your initial memorandum, a written reply to the Commission addressing the applicant's response, a site visit, meeting support for at least two Conservation Commission public hearings (held via Zoom), and a final report. The Town will facilitate communication with the applicant and provide additional information as needed. For reference, the associated materials can be found here.

If you are available and interested, please submit your proposal by noon on Tuesday, October 31st.

27 School Street, 5th Floor
Amherst, NY, USA 14228-1146

10/31/2023

David Morgan, Environmental Planner + Conservation Agent
Town of Arlington
730 Massachusetts Avenue
Arlington, MA 02476

Dear David :

Subject: Proposal for Stormwater Review of the Thorndike Place

The attached Offer for Engineering and Consultancy Services outlines the scope, approach to be used to complete the project, the deliverables and our commercial offer.

The overall cost is estimated to be $10,700 on a lump sum basis. Hatch will perform the work outlined in this Offer for Engineering and Consultancy Services in accordance with the attached Schedule of Rates and Professional Services Terms and Conditions. This letter, the Statement of Work, Hatch Standard Terms and Conditions and Hatch Schedule of Rates form the whole agreement between Town of Arlington and Hatch.

If this offer is acceptable to Town of Arlington, please sign the attached Acceptance and we can mobilize the team to start to undertake this work for you. If you would like to meet with me to clarify and further discuss any aspect of this offer, please call me at 978-224-3123.

Yours faithfully,

Duke Bitsko

DB:DB
Ref.: Document1
Attachment(s)

cc: Ross Mullen
Andrew Keel
Rob Kenneally

David Morgan, Environmental
Planner + Conservation Agent
Town of Arlington
10/31/2023

OFFER FOR ENGINEERING AND CONSULTANCY SERVICES

for

Proposal for Stormwater Review of the Thorndike Place

10/31/2023

Client Name:	Town of Arlington
Project Name:	Proposal for Stormwater Review of the Thorndike Place
Client Contact:	David Morgan, Environmental Planner + Conservation Agent
Hatch Contact:	Duke Bitsko, PLA
Estimated Start Date:	November 3, 2023
Estimated Completion Date:	November 22, 2023
Cost Basis:	Reimbursable Costs Basis
Project Estimate:	$10,700

Introduction

This proposal is response to a request for engineering services for a stormwater review of the Thorndike Place emailed to Duke Bitsko on October 26, 2023.

Scope of Work

Hatch proposes to complete a peer review of the proposed Thorndike Place development in accordance with the Massachusetts Stormwater Standards, the Code of Federal Regulations, and stormwater engineering best management practices. Our review will review the drawings and stormwater report with supporting technical calculation package. The review will include review of:

- Stormwater management facilities and technical calculations, including rate control, water quality analysis, and volume management/groundwater recharge.

- FEMA floodplain/floodway encroachments, compensatory storage, and CLOMR/LOMR/no-rise documentation.
- Best management practices for placement and use of Erosion and Sediment Controls including review of the SWPPP.
- Wetlands impacts due to construction disturbance and/or hydrologic inflow changes, mitigation/remediation of impacts and/or offsets, and provided buffers zones.
- Proposed Operation & Maintenance plan, including review of best practices for adoption such recording of stormwater practices on the plat and/or in storm maintenance agreement with the Town.

Our review will include an initial memorandum documenting our background document review, engineering review findings, as well as recommendations for approval, conditional approval, recommended site modification, or denial of the proposed development. We will respond to and/or review one additional submittal package from the applicant following the initial memorandum, attend up to 2 meetings via Teams, and attend a site visit.

Assumptions/Exclusions:

- Wetland delineations, classifications, and characterizations are excluded from this proposal.
- Virtual meeting attendance is limited to a project reference and called upon on an as-needed basis. Hatch has budgeted for 1 hour of staff attendance at each meeting and has not included hours necessary for presentation preparation for meetings. We assume these meetings will occur on or before December 22, 2023.
- Hatch has budgeted for one staff member to attend a site visit for up to 2-hours plus travel time.

Execution Plan

The proposed scope of work will be undertaken within a three-week period following receiving the authorization to proceed and being provided access to all of the data required for the task.

Hatch Project Team

The following is the proposed project team. Complete resumes can be made available upon request.

DUKE BITSKO, PLA

Principal In Charge

Duke Bitsko has more than 25 years of experience in program and project management, master planning, permitting, and design with an emphasis on context sensitive, sustainable design. His relevant experience includes ecological restoration, bioengineering, Green Infrastructure, and climate resiliency at the site scale. His recent work in Arlington includes Wellington Park, Spy Pond Shoreline Restoration, Egerton Road bioretention basins, and Cooke's Hollow. He has developed long-term Vegetation Management Plans for the Alewife Reservation, Fresh Pond Reservation, Wellington Park, and Spy Pond Park, working with managers over time to apply Adaptive Management principles. He has been a conservation commissioner in Lexington for 23 years.

ROB KENNEALLY, PE

Senior Project Engineer

Rob Kenneally has over 30 years of experience with increasing responsibilities as a civil/site design engineer and project manager. His technical background includes geotechnical engineering, hydrologic/hydraulic analysis, and civil site development. He has applied his technical expertise and project management experience on projects that range from the design and construction of stormwater management projects, management of landfill closures, to the construction of sewer mains utilizing hard rock and soft ground tunneling techniques, and to various subsurface site investigations involving environmental and geotechnical investigations.

ROSS MULLEN, PE, CFM

Water Resources Engineer

Ross recently joined Hatch as a Water Resources Engineer with over a decade of experience as a consulting engineer. His primary expertise is in hydrologic and hydraulic modeling, stormwater management, floodplain management, erosion and sediment management, urban water quality studies, stream restoration, and design of hydraulic structures. Ross previously served as the designated stormwater reviewer and engineering consultant for a 7-member city watershed.

Commercial Offer

Overview

Hatch is pleased to provide the following commercial offer to the Town of Arlington for the professional services (the "Services") detailed herein.

Pricing

Hatch proposes to perform the Services for a price of USD $10,700 on a lump sum price basis, exclusive of adjustments for variations. Approved variations will be performed on a lump sum basis in accordance with mutually agreed change procedures. An overview of this offer is provided in the Table 3.

Table 3: Estimated Breakdown of the Cost Estimate

Task	Level of Effort (hrs)	Total ($)
Desktop Stormwater Review	42	$9,000
Site Visit	4	$1,200
Attend two (2) Virtual Meetings	2	$500
TOTAL ESTIMATED COST:	**48**	**$10,700**

Basis of Compensation

As full compensation for the services, Hatch will be paid the sum of all lump sum billings incurred in the execution of the services.

Invoicing & Payment

Hatch proposes the following milestones for payment of the Lump Sum price following completion of the scope of work. Payment terms are net 30 days from date of issuance of invoice.

Hatch reserves the right to modify the payment milestones based on changes to the schedule or as mutually agreed to between Hatch and Town of Arlington.

Additional Services

If additional scope is needed, then Hatch will prepare a Project Change Authorization (PCA) which will provide an estimate of cost of the change and once agreed to and signed, Hatch will commence the work on this scope addition.

Contract Terms and Conditions

Hatch will perform the Services detailed in this offer in accordance with the Professional Services Terms and Conditions included in Attachment A, on which this proposal has been expressly based.

Validity

This offer remains valid for a period of 90 days from the date of this letter and is subject to a contract being signed and effective prior to the start.

Acceptance of Offer

Town of Arlington accepts this proposal and requests Hatch to undertake the assignment as detailed above.

Signed on behalf of Hatch by:		Signed on behalf of Town of Arlington by:	
Name:	Duke Bitsko, PLA	**Name:**	
Title:	Director of Interdisciplinary Design	**Title:**	
Date:		**Date:**	

Attachment A – Terms and Conditions

Attachment B – Schedule of Rates

CLIENT PROFESSIONAL SERVICES AGREEMENT

Kleinfelder Northeast, Inc. and Arlington, Massachusetts

This Agreement is made on: _____ between the Town of Arlington, MA (**Client**) and Kleinfelder Northeast, Inc. (**Kleinfelder**). Client hereby appoints Kleinfelder to provide certain Services (as defined below), and Kleinfelder hereby agrees to perform the Services, on the following terms and conditions:

1. SCOPE OF SERVICES

Client engages Kleinfelder to provide, and Kleinfelder agrees to provide, the professional services as set forth in Kleinfelder's Proposal dated October 31, 2023 (**Proposal**).

2. SCHEDULE AND PAYMENT

Kleinfelder shall perform the Services, and Client shall pay Kleinfelder, in accordance with the schedule and payment basis set forth in the Proposal.

3. GENERAL CONDITIONS AND ADDENDA

THE GENERAL CONDITIONS ON PAGE 2 CONTAIN INDEMNIFICATION, LIMITATION OF LIABILITY AND OTHER IMPORTANT PROVISIONS AFFECTING THE PARTIES' LEGAL RIGHTS AND OBLIGATIONS.

Client and Kleinfelder have read, understand and agree to this Agreement, the General Conditions, the Indemnity and Limitation of Liability provisions located on Page 2, and all Proposal, Fee Schedule and addenda identified herein.

This Agreement includes the terms herein, General Conditions and any Proposal, Fee Schedule and addenda identified herein, which taken together apply to all services undertaken pursuant to this Agreement, represent the parties' entire agreement of and supersedes all agreements on the same subjects between the parties, either oral or in writing, including any Client work or purchase order.

This Agreement is governed and construed in accordance with the laws of the state where the Services are performed. The parties irrevocably and unconditionally submit to the non-exclusive jurisdiction of the courts of such state and waive any right to object to any proceedings being brought in those courts. The parties hereby expressly waive any and all rights to trial by jury.

EXECUTED by the parties as of the date first written above:

CLIENT:	**KLEINFELDER:**
	
By: _____	**By:** _____
Printed Name: _____	Printed Name: Cecilia Carrion-Carmona
Title:	Title: Business Operations Manager, Kleinfelder Northeast, Inc.

CLIENT PROFESSIONAL SERVICES AGREEMENT – GENERAL CONDITIONS

1. **Standard of Care.** Kleinfelder will perform its Services in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the Services are provided. Kleinfelder makes no representation, guarantee or warranty, express or implied, regarding the Services, or any communication (oral or written), certification, report, opinion, or Instrument of Service provided under or pursuant to this Agreement.

2. **Insurance**. Kleinfelder will maintain worker's compensation, commercial general liability, automobile liability and professional indemnity insurance coverage. Client will maintain adequate insurance coverage and will require and verify any contractors or parties it hires to have adequate insurance coverage. Client agrees that its failure to comply with this clause invalidates any indemnity by Kleinfelder hereunder.

3. **Pricing and Payment.** The hourly rates charged for Kleinfelder's Services are adjusted annually in January of each year to reflect changes in the various elements that comprise such hourly rates. Kleinfelder reserves the right to periodically adjust its fee schedule. Except as otherwise provided in the first page of this agreement or Proposal, Client shall pay invoices upon receipt. Invoices not paid within thirty (30) days of invoice date incur a fee of 1½ % per month from the date of invoice and suspension by Kleinfelder of all Services.

4. **Prevailing Wages.** It is Client's legal responsibility to determine whether the Project is covered under prevailing wage regulations. Unless Client specifically informs Consultant in writing that the Project is a prevailing wage project and is identified as such in Consultant's Scope of Services, Client agrees to defend, indemnify and hold harmless Consultant from and against all liabilities, losses, claims, costs and damages (including reasonable costs and attorneys fees), resulting from a determination that the Project was covered under prevailing wage regulations.

5. **Termination.** Either party may terminate this Agreement at any time upon written notice, whether for cause or for convenience, in which event Client shall pay Kleinfelder for such portion of the Services performed and materials provided up to the date of termination.

6. **Performance.** Kleinfelder will perform the Services as an independent contractor and will not act as Client's agent or employee. The parties do not intend to create, and nothing in this Agreement will be construed to create, any special relationship or fiduciary duty. Kleinfelder will be subject to and operate in compliance with all federal, state and local laws and regulations. Client agrees that Kleinfelder will not be responsible for the means, methods, techniques, sequences or procedures of construction, for constant or exhaustive inspection of construction work, or for the safety procedures employed by any party other than its own employees and subcontractors. Kleinfelder will only sign certifications relating to the Services if Kleinfelder agreed in writing prior to the commencement of the Services to provide them. Such certifications are statements of professional opinion only. Kleinfelder will not be liable for delay or failure to perform its Services caused directly or indirectly by circumstances beyond its control, including but not limited to, acts of God, fire, flood, war, sabotage, accident, labor dispute, shortage, government action or inaction, changed conditions, site inaccessibility, or delays due to actions or inactions of Client or others.

7. **Client Responsibilities.** Client agrees to provide all available material, data, and information pertaining to the Services, including, without limitation, (i) composition, quantity, toxicity, or potentially hazardous properties of any material known or believed to be present at any site, (ii) hazards that may be present, (iii) nature and location of underground or otherwise not readily apparent utilities, (iv) summaries and assessments of site past and present compliance status, (v) status of any judicial or administrative action concerning the site or Project, and (vi) Client's relevant benchmarks, plans, maps, and property ownership records. Client will ensure the cooperation of Client's employees, contractors and consultants ("Client Parties") with Kleinfelder. Kleinfelder is entitled to rely upon the accuracy and completeness of all information given by Client Parties.

8. INDEMNITY; LIMITATION OF LIABILITY. Client will defend, indemnify and hold harmless Kleinfelder, its officers, directors, parent, affiliates, shareholders and employees, from and against any all claims, demands, causes of action, damages or other liabilities, including but not limited to attorney's fees and other legal expenses reasonably incurred by Kleinfelder (collectively, "Claims"), that arise from performance of the Services or from Kleinfelder's acts, errors or omissions in connection with the Project or this Agreement, excepting Claims arising from the sole negligence or wilful misconduct of Kleinfelder. The maximum aggregate liability of Kleinfelder in connection with this Agreement and all amendments thereto, whether based in contract or tort or otherwise in law or equity, will be limited to the greater of the compensation actually paid to Kleinfelder for the Services hereunder or $50,000, and Client hereby releases Kleinfelder from any liability above such amount. Upon Client's written request, the parties may negotiate and enter a written amendment in accordance with clause 11 herein to increase the amount of this limitation of liability in exchange for an increased payment to Kleinfelder. As used in this clause 8, "Kleinfelder" includes Kleinfelder, its affiliates, subcontractors, and each of their respective partners, officers, directors, shareholders and employees. Neither party will be liable to the other for any special, incidental, indirect, exemplary, punitive or consequential damages however arising incurred by either Kleinfelder or Client or for which either may be liable to a third party.

9. **Reliance.** The documents provided by Kleinfelder to Client under this Agreement may be based on information obtained from sources outside Kleinfelder's control. Other than the application of prudent professional care in their evaluation, Kleinfelder does not warrant, expressed or implied the accuracy thereof. All documentation furnished to Client is intended for the benefit of the Client for the purpose stated herein and is not intended or represented to be suited for reuse by Client or others. Any reuse or provision of the documents to others without the specific written consent of Kleinfelder for the specific purposes intended will be at user's sole risk and without liability and legal exposure to Kleinfelder.

10. **Hazardous Materials; Samples.** Kleinfelder will not take title to or be liable for any hazardous materials found at any project site. Any risk of loss with respect to all materials remains with the Client or the site owner, who will be considered the generator of such materials, execute all manifests as the generator of them, and be liable for the arrangement, transportation, treatment, and disposal of all material. All samples remain the Client's property. Client agrees to promptly, at its cost, remove and lawfully dispose of samples, cuttings, and hazardous materials.

11. **Amendments, Changes, Assignment, Waiver, Compliance.** This Agreement represents the entire agreement of the parties, and may be modified only in a writing signed by both parties. To the extent of any inconsistency between this Agreement and any other document, the provisions of this Agreement will always prevail. Any preprinted terms and conditions on forms used by either party in the administration of this Agreement are void and shall not act to supplement or replace these Terms and Conditions. Neither party may assign this Agreement without the other's prior written consent. Waiver of any term, condition or breach of this Agreement will not operate as a waiver of any other term, condition or breach. Client and Kleinfelder shall abide by 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a), which prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on race, color, religion, sex or national origin. Covered contractors and subcontractors shall take affirmative action to employ and advance individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

October 31, 2023

David Morgan, Conservation Agent
Town of Arlington, MA
730 Mass Ave. Annex
Arlington, MA 02476

Re: Proposal scope – Peer Review of Stormwater Design
Thorndike Place Notice of Intent Application

Dear Mr. Morgan,

Kleinfelder is submitting with this letter a proposed Scope of Services for technical support to the Arlington Conservation Commission. It is Kleinfelder's understanding that the Arlington Conservation Commission is seeking a peer review of the Stormwater Report and Management Plan associated with the Thorndike Place development to determine compliance with the Massachusetts Stormwater Standards.

Thorndike Place is a proposed multifamily development in east Arlington along Route 2. The subject site contains Bordering Vegetated Wetland, Buffer Zone to BVW, and Bordering Land Subject to Flooding. The application is being considered under the Wetlands Protection Act (WPA). Arlington Land Realty, LLC of Boston is the applicant with support from the BSC Group.

Kleinfelder anticipates the following scope of work to support the Arlington Conservation Commission:

Task 1: Document Review

Kleinfelder will hold an initial meeting with the Arlington Conservation Agent to develop a complete understanding of the project. In addition, we will conduct reviews of the following provided documentation:

A. Stormwater Report (September 2023)
B. Thorndike Place Plan Set (September 2023)
C. Notice of Intent filing (September 2023)

Task 2: Site Visit

Kleinfelder will conduct a site visit to obtain a comprehensive understanding of site conditions, location and proximity to resource areas.

Deliverable:

Based on information gathered in Tasks 1 and 2, Kleinfelder will prepare a summary memorandum to document findings and provide conclusions and recommendations to the Arlington Conservation Commission.

KLEINFELDER One Beacon Street, Suite 8100, Boston, MA 02108 p | 617.497.7800 f | 617.498.4630

Task 3: Review of Applicant Team's Response to Comments and Client Representation

Kleinfelder will conduct a review of the Applicant's response to our review summary to ensure that all points are being addressed and there is agreement on approach moving forward. Additionally, Kleinfelder will attend two Conservation Commission public hearings to present findings.

Deliverables:

1. Memorandum of findings
2. Letter response to Applicant response to comments
3. Attendance (virtual) at two Conservation Commission public hearings

Assumptions:

Kleinfelder is assuming that the memorandum of findings will include a limited review of the stormwater design only.

Schedule

Kleinfelder will commence work immediately upon receipt of a signed task order. Kleinfelder assumes a project duration of approximately 3 months (February 2023) to allow review and comment period.

Fee

Kleinfelder anticipates needing 40 hours of senior technical staff to support for this effort. Based on this estimate, Kleinfelder proposes to provide support to the Arlington Conservation Commission as described above on a time and materials basis to a maximum of $10,000 (Ten Thousand Dollars). All time and expenses will be charged as noted in the attached rate table. Should additional effort be warranted based on additional meetings or iterations of design review, Kleinfelder will notify the Commission prior to proceeding with out-of-scope work.

This proposal is valid for a period of 3 months from the date of this proposal. If authorization or review periods significantly extend beyond the established timeframe, Kleinfelder reserves the right to negotiate adjustment to pricing.

Sincerely,

KLEINFELDER

Peter Varga, Project Manager

Attachments: Rate table, terms and conditions

cc: Kyle Johnson, Greg Avenia, Chris Balerna, Kleinfelder
File

KLEINFELDER One Beacon Street, Suite 8100, Boston, MA 02108 p | 617.497.7800 f | 617.498.4630

Hourly Billing Rate Schedule

Rates effective through 8/1/2024, subject to 5% escalation thereafter

Position	**Maximum Billing Rate***
Sr. Program Manager	$330
Sr. Principal Professional	$310
Project Manager III	$260
Principal Professional	$240
Sr. Professional	$200
Project Manager II	$180
Project Professional	$170
Staff Professional II	$150
Staff Professional I	$130
Professional	$110

**Actual billing rates vary by staff member, maximum rate per position provided*

Mileage Reimbursement: IRS federal mileage rate

Additional rates for personnel not listed will be provided upon request

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

October 31, 2023

David Morgan
Environmental Planner & Conservation Agent
Department of Planning and Community Development
730 Massachusetts Ave
Arlington, MA 02476

Re: **Proposal for Professional Engineering Services**
Stormwater Peer Review for Proposed Thorndike Place Development

Dear Mr. Morgan:

Weston & Sampson is pleased to present our proposal to provide peer review services related to the proposed Thorndike Place development. We will evaluate the proposed project's stormwater management system for compliance with the Massachusetts Stormwater Standards and other applicable local regulations as discussed below. The following project documents have been provided to Weston & Sampson by the Town of Arlington:

- Notice of Intent Cover Letter, prepared by BSC Group, September 6, 2023
- Notice of Intent Submittal, prepared by BSC Group, September 2023
- Thorndike Place Plan Set, prepared by BSC Group, September 6, 2023
- Stormwater Report for Thorndike Place, prepared by BSC Group, September 2023

We will perform the following specific tasks related to the drainage system evaluation:

- Review the Stormwater Report, Plan Set, Notice of Intent, and other relevant background information prepared for the project.
- Review the proposed drainage design for compliance with the Massachusetts Stormwater Standards.
- Confirm the drainage catchment areas.
- Review HydroCAD model parameters and output results.
- Check sizing of infiltration system components.
- Review the mounding analysis and supporting test pit logs provided by the applicant to evaluate the feasibility of the proposed infiltration systems.
- Conduct one (1) site visit.
- Prepare a letter report to summarize our results and provide recommendations for appropriate modifications or improvements.
- Review the applicant's response to our initial letter report and prepare a written reply to the Conservation Commission addressing the applicant's response.

- Attend up to four (4) meetings to present our report and discuss our recommendations. This includes two (2) virtual meeting with the Developer and/or the Town, and two (2) virtual Conservation Commission public hearings.

Time of Project

Weston & Sampson can begin work immediately following a notice to proceed and submit our initial peer review report within four (4) weeks. Upon receipt of a response from the applicant, we can prepare a written reply to the Conservation Commission within three (3) weeks.

Payment

The sum of all work shall be performed for a lump sum fee of $25,000 for the scope of services described herein. For services performed under this Proposal, fees shall be billed monthly as they accrue based upon the services performed as a percent of the total lump sum fee .

We appreciate the opportunity to submit this proposal. If you have any questions or need additional information please contact me. I may be reached at (978) 532-1900 or elmerd@wseinc.com.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

David M. Elmer, P.E.
Discipline Leader/Vice President

Town of Arlington, Massachusetts

Request for Determination of Applicability: 70 Dow Avenue.

Summary:
Request for Determination of Applicability: 70 Dow Avenue.

The Conservation Commission will hold a public hearing to consider a Request for Determination of Applicability under the Wetlands Protection Act (WPA) and Arlington Bylaw for Wetlands Protection for an addition to the existing structure at 70 Dow Avenue in Arlington.

ATTACHMENTS:

	Type	File Name	Description
🗋	Reference Material	70_Dow_Avenue_-_RDA_-_10.24.23.pdf	70 Dow Avenue - RDA - 10.24.23.pdf

October 24, 2023

Electronic Delivery and Hand Delivery

Arlington Conservation Commission
Arlington Town Hall Annex
730 Massachusetts Avenue
Arlington, MA 02476

Re: Request for Determination of Applicability [LEC File #: ERG\23-464.04]
70 Dow Avenue
Assessor's Parcel ID: 178-4-3
Arlington, Massachusetts

Dear Members of the Conservation Commission:

On behalf of the Applicant, Express Remodeling Group (Samantha Almeida, Contact), LEC Environmental Consultants, Inc., (LEC) is re-filing the enclosed Request for Determination of Applicability (RDA) with the Arlington Conservation Commission to confirm that no Wetland Resource Areas jurisdictional under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing Regulations (310 CMR 10.00, the *Act Regulations*), and the *Town of Arlington Wetlands Protection Bylaw* (Article 8, the *Bylaw*) and its implementing *Wetlands Protection Regulations* (March 1, 2018, the *Bylaw Regulations*) occur on the site.

The Applicant filed for a Building Permit in December of 2022 for the construction of an addition and deck off the rear of a single-family dwelling. The Building Permit has been on hold due to the the Town of Arlington GIS Map, which indicates a regulated area in the vicinity of the site (Appendix C, Figure 4).

LEC was retained by Express Remodeling Group to conduct a site evaluation and Wetland Resource Area boundary determination at the property. Our site evaluation was conducted in accordance with the *Act*, the *Bylaw*, and *Bylaw Regulations*, and the criteria provided in the *Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands* (Second edition, 2022), and *Field Indicators for Identifying Hydric Soils in New England* (Version 4, June 2020, the *Field Indicators Guide*). Our observations suggest that no jurisdictional wetland resource areas under the *Act* or the *Bylaw* occur on or within 100 feet of the subject property as further outlined below.

Appendix A contains the *WPA Form 1 – Request for Determination of Applicability* and *Bylaw Filing Fees and Transmittal Form*; Appendix B contains the Abutter Notification documents required under the *Bylaw*; Appendix C contains pertinent maps and figures; and Appendix D contains a *Plan of Land*

prepared by Professional Land Surveyor Thomas Bernardi dated October 2, 2023. A check payable to the Town of Arlington in the amount of One Hundred Fifty Dollars ($150.00) for the purpose of filing this RDA under the *Bylaw* will be delivered by the Applicant.

General Site Description

The 5,500± square foot property is located north of George Street and south of Valentine Road within the southwest portion of Arlington, Massachusetts (Appendix C, Figures 1, 3, and 4). More specifically, the property is located on the east side of Dow Avenue, northeast of the Rhinecliff Street intersection. Residential development associated with Dow Avenue, George Street, and Rhinecliff Street occurs to the north, west, and south, while the Cyrus E. Dallin School is located southeast of the site.

The property contains a 2-story, single-family dwelling with a paved driveway extending from Dow Avenue to a detached one-car garage. A concrete walkway extends from the driveway to a porch, providing access to the dwelling via a side entrance. A 6-foot-high wooden privacy fence occurs along the northwestern property line, while a chain link fence runs along the southeastern and western property lines. The dwelling and associated appurtenances are surrounded by lawn and landscaped areas.

Landscape plants include rhododendron and azalea (*Rhododendron* spp.), hosta (*Hosta* sp.), Arborvitae (*Arborvitae* sp.), and rose of Sharon (*Hibiscus syriacus*). Topography gently descends southeasterly from Dow Avenue toward the backyard, and then ascends toward off-site forested uplands located southeast of the property. The canopy contains patches of Norway maple (*Acer platanoides*), with scattered individuals of American linden (*Tillia* sp.), and a single swamp white oak (*Quercus bicolor*). The understory contains patches of Japanese knotweed (*Polygonum cuspidatum*), while the groundcover contains clusters of jewelweed (*Impatiens capensis*), and ground ivy (*Glechoma hederacea*), with individuals of seedling Oriental bittersweet (*Celastrus scandens*). Entanglements of Virginia creeper (*Parthenocissus quinquefolia*) are also present in patches.

Using a hand-held, Dutch-style soil auger, LEC inspected soil conditions within uplands within the lowest elevations in the backyard and observed 10+ inches of loamy sand historic fill material (A horizon) with a soil matrix color of 10YR 2/2. The topsoil is underlain by a 3± inch thick layer of coal ash. The coal ash is underlain by a 9-inch thick, buried mucky mineral topsoil (A horizon) with a soil matrix color of 10YR 2/1. The buried topsoil is underlain by a 5+ inch thick, depleted silt loam subsoil (B_g horizon) with a soil matrix color of 2.5Y 4/1. Given the depth of historic fill material and lack of any indicators of hydrology within the fill, the soil profile is not considered hydric in accordance with the *Field Indicators Guide*.

Natural Heritage and Endangered Species Program Designation

According to the 2021 version of the *Massachusetts Natural Heritage Atlas,* no areas of Estimated Habitats of Rare Wildlife or Priority Habitats of Rare Species or Potential or Certified Vernal Pools exist on the site (Appendix C, Figure 3).

Floodplain Designation

According to the June 4, 2010 *Federal Emergency Management Agency Flood Insurance Rate Map* for Middlesex County, Massachusetts (Map No: 25017C0403E), the property is located within Zone X [unshaded]: *Areas determined to be outside the 0.2% annual chance floodplain* (Appendix C, Figure 2).

Site Evaluation

Northeastern view of drainage ditch and pipes

LEC conducted a site evaluation on October 12, 2023, to conduct a site evaluation and Wetland Resource Area boundary determination at the above-referenced site. During our evaluation, LEC observed an offsite, roughly 6-foot section of a stone-lined drainage ditch that flows from a corrugated plastic pipe to an old concrete culvert with a metal grate.

Two pink 'Wetland Delineation" flags were observed at either end of the drainage ditch with the phrase "Bank?" written in black.

LEC conducted site reconnaissance 100+ feet up-gradient and down-gradient of the ditch to determine whether any potential jurisdictional Wetland Resource Areas connect to the ditch and observed none. No evidence of any depressions or plant communities that would suggest a jurisdictional wetland within the proximity of 70 Dow Avenue were observed. The surrounding area appears to contain upland plant species similar to the community described above. It appears that the old concrete drainage pipe likely directs surface water from the plastic corrugated pipe toward stormwater infrastructure located at the intersection of George Street and Rhinecliff Street.

Based on our site evaluation and our observations of an upland plant community adjacent to the drainage ditch, alignment with the existing stormwater infrastructure, and lack of any evidence of wetlands in the surrounding area, LEC has determined that the drainage ditch is not jurisdictional under the *Act* and/or the *Bylaw*, and that no jurisdictional wetlands under the *Act* or the *Bylaw* are present on or in proximity to the site. Accordingly, the Applicant request that the Commission issue a Negative Determination of Applicability and that the Conservation Agent sign off on the Building Permit.

Thank you for your consideration of this RDA. We look forward to meeting with the Commission at the November 2, 2023 Public Hearing. Should you have any questions or require additional information, please do not hesitate to contact me via email at rkirby@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

Richard A. Kirby
Senior Wetland Scientist

Appendices

cc: DEP, Northeast Region
Express Remodeling Group
Thomas Bernardi, PLS
Express Investment Group, LLC

rak: projects\23-464.02\RD Cover Letter.doc

Appendix A

WPA Form 1 – *Request for Determination of Applicability*

Bylaw Filing Fees and Transmittal Form

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

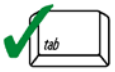
Arlington
City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
Arlington Wetlands Protection Bylaw (Article 8)

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Express Remodeling Group (Samantha Almeida, Contact) — Name
express@expcontractor.com — E-Mail Address
178 Winthrop Street — Mailing Address
Medford — City/Town
MA — State
02155 — Zip Code
(781) 723-1426 — Phone Number
(781) 723-1439 — Fax Number (if applicable)

2. Representative (if any):

LEC Environmental Consultants, Inc. — Firm
Richard A. Kirby, Senior Wetland Scientist — Contact Name
rkirby@lecenvironmental.com — E-Mail Address
380 Lowell Street, Suite 101 — Mailing Address
Wakefield — City/Town
MA — State
01880 — Zip Code
781-245-2500 — Phone Number
781-245-6677 — Fax Number (if applicable)

B. Determinations

1. I request the Arlington (Conservation Commission) make the following determination(s). Check any that apply:

☒ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.

☐ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.

☐ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.

Arlington
Name of Municipality

☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

70 Dow Avenue	Arlington
Street Address	City/Town
Assessor's Parcel ID: 178-4-3	
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

The 5,500± square foot property is located north of George Street and south of Valentine Road within the southwest portion of Arlington. More specifically, the property is located on the east side of Dow Avenue, northeast of the Rhinecliff Street intersection. Residential development associated with Dow Avenue, George Street, and Rhinecliff Street occurs to the north, west, and south, while the Cyrus E. Dallin School is located southeast of the site. A roughly 6-foot section of non-jurisdictional drainage ditch occurs off-site to the southeast, and the Applicant is filing this RDA for confirmation that this ditch is not jurisdictional. No other jurisdictional Wetland Resource Areas were observed on or within 100 feet of the site. Please refer to the attached Cover Letter for further details.

c. Plan and/or Map Reference(s):

Plan of Land prepared by Thomas Bernardi, PLS	10/02/2023
Title	Date
Title	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

The Applicant proposes to construct a living space addition and deck of the rear of the existing dwelling.

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

310 CMR 10.02 (2) (d): Any activity proposed or undertaken outside the areas specified in 310 CMR 10.02(1) and outside the Buffer Zone is not subject to regulation under M.G.L. c. 131, § 40 and does not require the filing of a Notice of Intent unless and until that activity actually alters an Area Subject to Protection under M.G.L. c. 131, § 40…

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

☐ Single family house on a lot recorded on or before 8/1/96

☐ Single family house on a lot recorded after 8/1/96

☐ Expansion of an existing structure on a lot recorded after 8/1/96

☐ Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96

☐ New agriculture or aquaculture project

☐ Public project where funds were appropriated prior to 8/7/96

☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision

☐ Residential subdivision; institutional, industrial, or commercial project

☐ Municipal project

☐ District, county, state, or federal government project

☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Express Investment Group, LLC (Samamtha Almeida, Contact)
Name

140 Winthrop Road
Mailing Address

Medford
City/Town

MA
State

02155
Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant

October 20, 2023
Date

Signature of Representative (if any)

October 20, 2023
Date

Bylaw Filing Fees and Transmittal Form

Rules:

1.Fees are payable at the time of filing the application and are non-refundable.
2.Fees shall be calculated per schedule below.
3.Town, County, State, and Federal Projects are exempt from fees.
4.These fees are in addition to the fees paid under M.G.L. Ch. 131, s.40 (ACT).

Fee Schedule (ACC approved 1/8/15):

$	No./Area	Category
$150.00	1	**(R1) RDA**- $150 local fee, no state fee
		(N1) Minor Project - $200 (house addition, tennis court, swimming pool, utility work, work in/on/or affecting any body of water, wetland or floodplain).
		(N2) Single Family Dwelling - $600
		(N3) Multiple Dwelling Structures - $600 + $100 per unit all or part of which lies within 100 feet of wetlands or within land subject to flooding.
		(N4) Commercial, Industrial, and Institutional Projects - $800 + 50¢/s.f. wetland disturbed; 2¢/s.f. land subject to flooding or buffer zone disturbed.
		(N5) Subdivisions - $600 + $4/l.f. feet of roadway sideline within 100 ft. of wetlands or within land subject to flooding.
		(N6) Other Fees - copies, printouts; per public records law
		(N7) Minor Project Change - $50
		(N8) Work on Docks, Piers, Revetments, Dikes, etc - $4 per linear foot
		(N9) Resource Boundary Delineation (ANRAD) - $1 per linear foot
		(N10) Certificate of Compliance (COC or PCOC) - No charge if before expiration of Order, $200 if after that date.
		(N11) Amendments - $300 or 50% of original local filing fee, whichever is less.
		(N12) Extensions -
		a. Single family dwelling or minor project - $100.
		b. Other - $150.
		(N13) Consultant Fee -per estimate from consultant
$150.00	**TOTAL**	

Note: Submit this form along with the forms submitted for the ACT - the "Wetlands Filing Fee Calculations Worksheet," and the "Notice of Intent Fee Transmittal Form."

Appendix B

Affidavit of Service
Abutter Notification Letter
Abutter Notification Form
List of Abutters and Map

Affidavit of Service

I, Sharon A. Sullivan, being duly sworn, do hereby state as follows:

On October 25, 2023, I mailed a "Notification to Abutters" in compliance with the Arlington Wetlands Protection Bylaw, Title V, Article 8 of the Town of Arlington Bylaws in connection with the following matter:

Confirmation that no jurisdictional Wetland Resource Areas occur on or within 100 feet of 70 Dow Avenue, Arlington, MA.

The form of the notification, and a list of the abutters to whom it was provided and their addresses, are attached to this Affidavit of Service.

Signed under the pains and penalties of perjury, this 25th day of October 2023.

Sharon A. Sullivan

Sharon A. Sullivan
Permitting Technician

October 25, 2023

CERTIFIED MAIL

«Name»
«Name2»
«Address»
«City», «State» «Zip»

Re: Request for Determination of Applicability [LEC File #: ERG\23-464.04]
70 Dow Avenue
Assessor's Parcel ID: 178-4-3
Arlington, Massachusetts

Dear Abutter:

On behalf of the Applicant, Express Remodeling Group, LEC Environmental Consultants, Inc. (LEC) has filed a Request for Determination of Applicability (RDA) Application with the Arlington Conservation Commission to confirm that no jurisdictional Wetland Resource Areas under the *Massachusetts Wetlands Protection Act* (the *Act*, M.G.L. c. 131, s. 40) and its implementing *Regulations* (the *Act Regulations*, 310 CMR 10.00), and the *Town of Arlington Wetlands Protection Bylaw* (Article 8, the *Bylaw*) and its *Regulations Pursuant to the Town of Arlington Regulations for Wetlands Protection* (the *Bylaw Regulations*) occur on or within 100 feet of the subject property.

The RDA Application and accompanying plans are available for review by contacting the Arlington Conservation Commission. The remote Public Hearing will be held on November 2, 2023 beginning at 7:00 p.m., in accordance with the provisions of the *Act, Regulations, Bylaw,* and *Bylaw Regulations*. Further information regarding this application will be published at least five (5) days in advance in *The Arlington Advocate.* Notice of the Public Hearing will also be posted at the Arlington Town Hall at least 48 hours in advance. Please check the Town's website and the Board/Committee's page for any updated information on the meeting.

Please do not hesitate to review the materials and/or attend the public hearing should you have questions or concerns about the proposed project.

Sincerely,

LEC Environmental Consultants, Inc.

Richard A. Kirby
Senior Wetland Scientist

Abutter Notification

Notification to Abutters Under the
Arlington Wetlands Protection Bylaw

In accordance with the Arlington Wetlands Protection Bylaw, you are hereby notified of the following:

The Conservation Commission will hold a virtual public meeting using Zoom on Thursday, November 2, 2023, at 7:00 p.m. in accordance with the provisions of the Town of Arlington Bylaws Article 8, Bylaw for Wetland Protection, and in accordance with the Governor's Order Suspending Certain Provisions of the Open Meeting Law, G. L. c. 30A, § 20 relating to the COVID-19 emergency, for a Request for Determination of Applicability from Express Remodeling Group for confirmation that no jurisdictional Wetland Resource Areas occur on or within 100 feet of 70 Dow Avenue (Assessor's Property Map 178-4-3). Please refer to the Commission's online meeting agenda for specific Zoom meeting access information.

A copy of the application and accompanying plans are available by request by contacting the Arlington Conservation Commission at 781-316-3012 or mmuszynski@town.arlington.ma.us. For more information, call the Applicant's representative, LEC Environmental Consultants, Inc., at 781-245-2500 or the Arlington Conservation Commission at 781-316-3229, or the DEP Northeast Regional Office at 978-694-3200.

NOTE: Notice of the Public Hearing will be published at least five (5) business days in advance in *The Arlington Advocate* and will also be posted at least 48 hours in advance in the Arlington Town Hall.

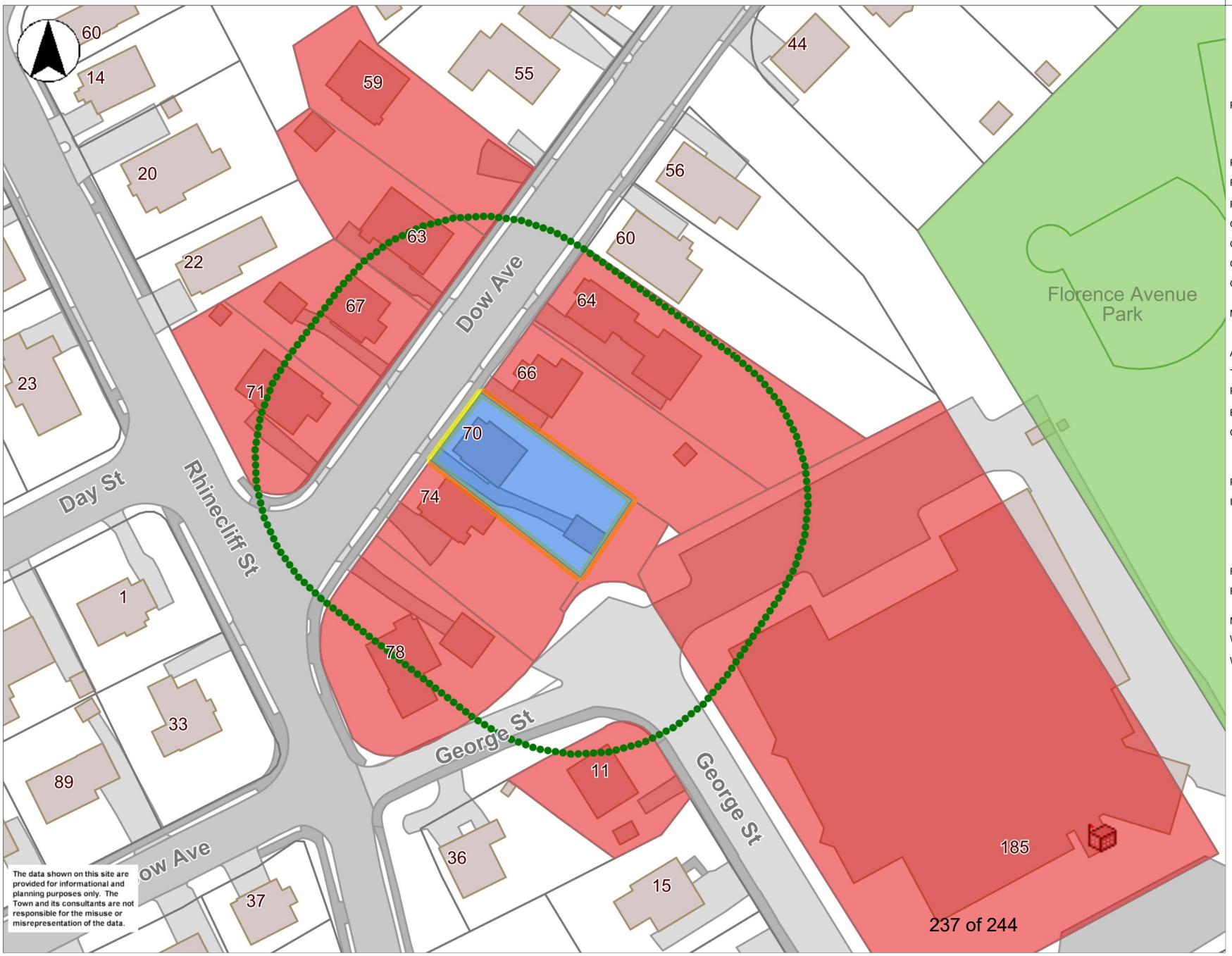
****

CERTIFIED ABUTTERS LIST
Date: October 19, 2023
Subject Property Location: 70 DOW AVE Arlington, MA
Subject Property ID: 178-4-3
Search Distance: 100 Feet Conservation

Parcel ID	Property Location	Name	Name2	Address	City	State	Zip
159-10-1	185 FLORENCE AVE	TOWN OF ARLINGTON SCHOOL	DALLIN SCHOOL	730 MASS AVE	ARLINGTON	MA	02476
178-3-2.A	59 DOW AVE	MURPHY KERRY L		59 DOW AVE	ARLINGTON	MA	02476
178-3-3	63 DOW AVE	MCGRATH LARA & EDWARD		63 DOW AVE	ARLINGTON	MA	02476
178-3-4	67 DOW AVE	MCMURRAY DEBORAH		67 DOW AVENUE	ARLINGTON	MA	02476
178-3-5	71 DOW AVE	MC DONOUGH PAUL F--ETAL	MC DONOUGH JACQUELINE M	71 DOW AVE	ARLINGTON	MA	02476
178-4-1.A	64 DOW AVE	SULLIVAN DUANE M/ETAL	MALOUF RICHARD A & DONNA M	64 DOW AVENUE	ARLINGTON	MA	02476
178-4-2.A	66 DOW AVE	CASEY ELLEN		66 DOW AVENUE	ARLINGTON	MA	02476
178-4-3	70 DOW AVE	EXPRESS GROUP INVESTMENTS LLC		180 WINTHROP ST	MEDFORD	MA	02155
178-4-4	74 DOW AVE	WILLIAMS CHRISTOPHER/ETAL	MCCAFFREY BRIDGET	74 DOW AVENUE	ARLINGTON	MA	02476
178-4-5	78 DOW AVE	CHIHA STEPHANIE G/ TRUSTEE	STEPHANIE G CHIHA TRUST	78 DOW AVE	ARLINGTON	MA	02476
178-4-6.A	0-LOT GEORGE ST	TOWN OF ARLINGTON SELECTMEN	Town Hall	730 MASS AVE	ARLINGTON	MA	02476
178-11-1	11 GEORGE ST	EVANS PETER N &	MASCARENHAS ELENA S	11 GEORGE ST	ARLINGTON	MA	02476

The Board of Assessors certifies the names and addresses of the requested parties in interest, all abutters to a single parcel within 100 feet.

Town of Arlington
Office of the Board of Assessors
730 Massachusetts Ave.
Arlington, MA 02476
phone: 781.316.3050
email: assessors@town.arlington.ma.us



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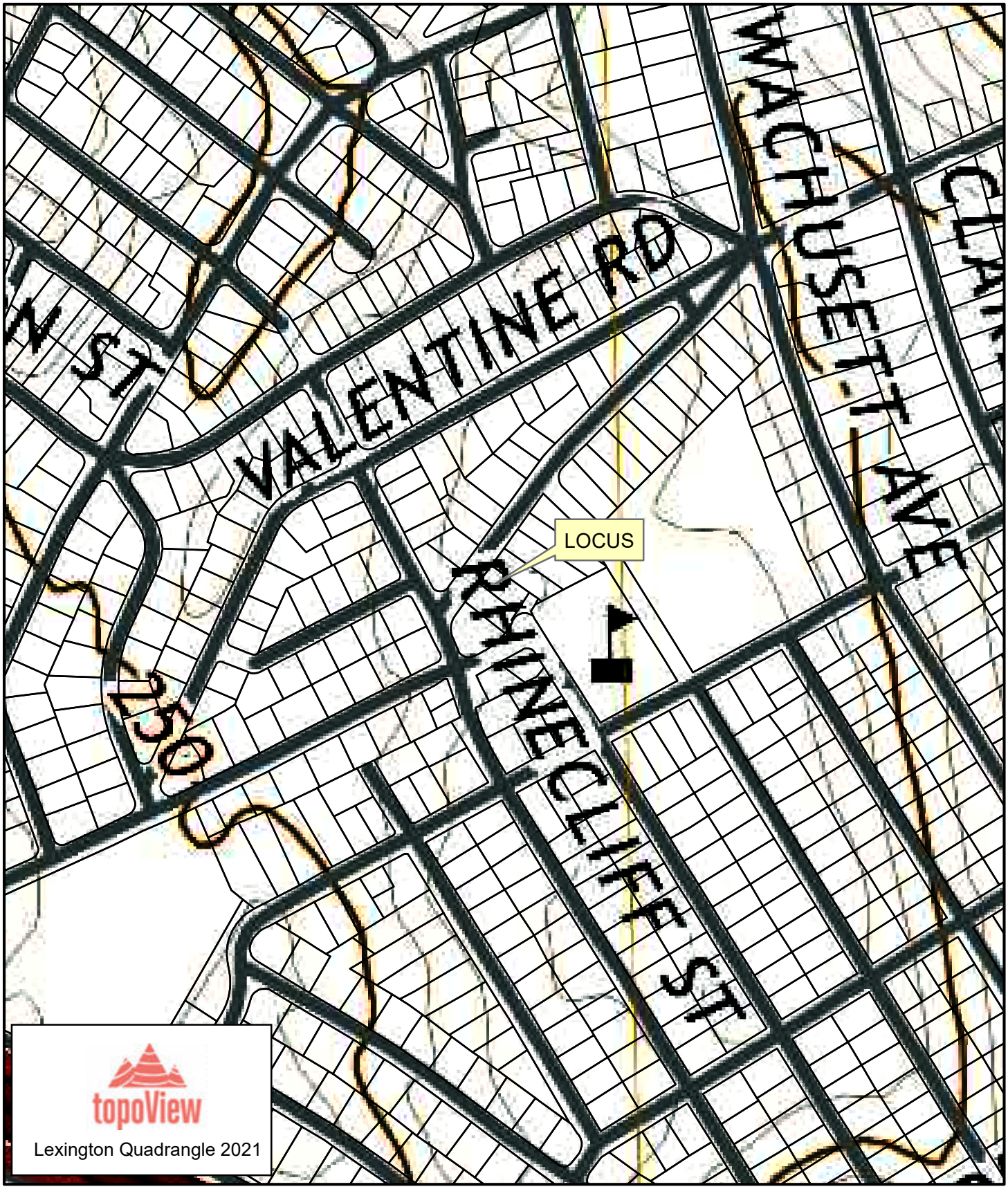
Appendix C

Figure 1: USGS Topographic Map

Figure 2: FEMA FIRMette

Figure 3: MassGIS Orthophoto

Figure 4: Arlington GIS Map



LEC
Environmental Consultants, Inc.
Wakefield, MA
781.245.2500

www.lecenvironmental.com

Figure 1: USGS Topographic Map
70 Dow Avenue
Arlington, MA

October 24, 2023

N

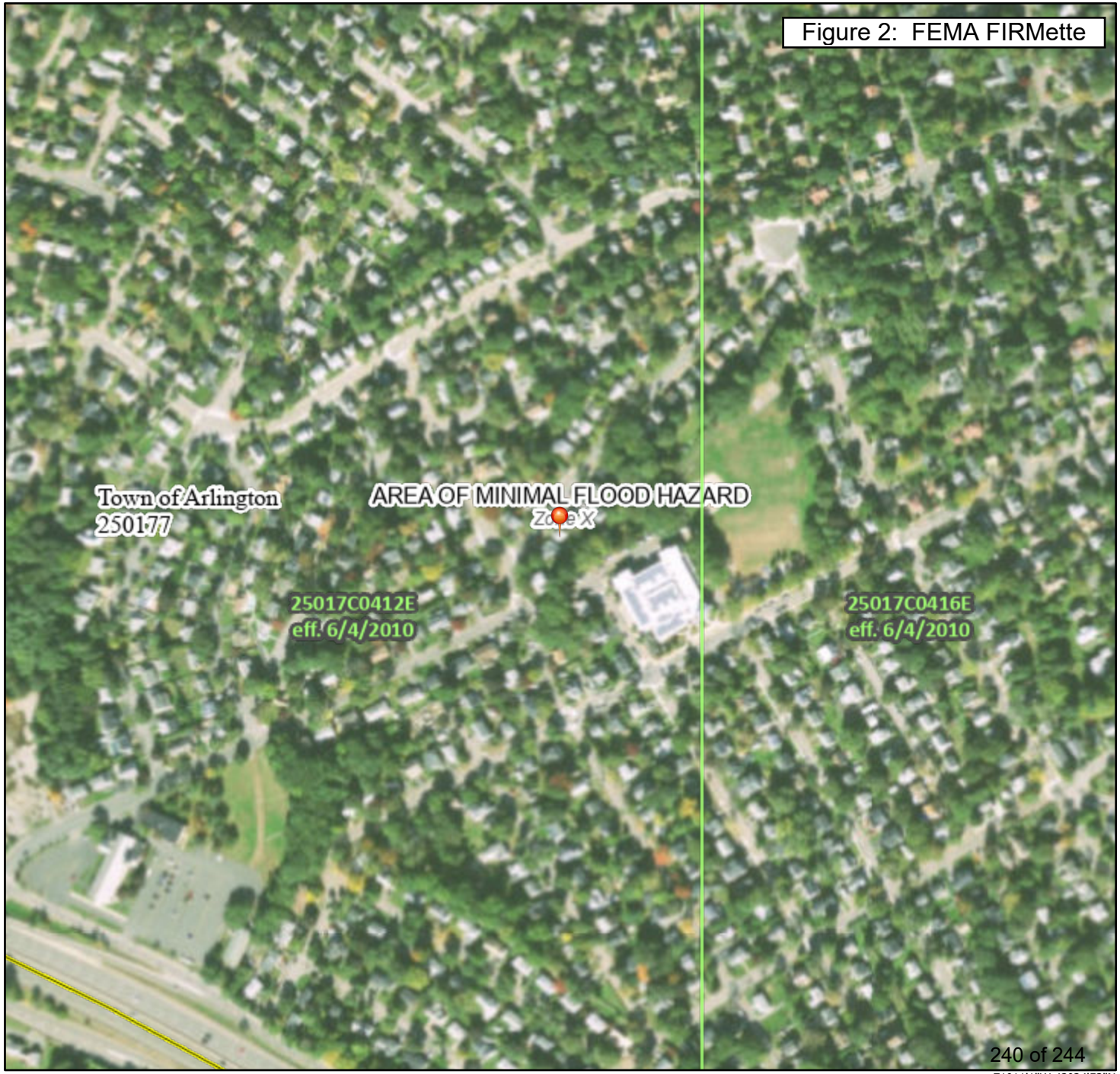
0 150 300 Feet

National Flood Hazard Layer FIRMette

71°11'38"W 42°25'18"N

FEMA

Figure 2: FEMA FIRMette



0 250 500 1,000 1,500 2,000 Feet

1:6,000

71°11'1"W 42°24'52"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/4/2023 at 10:10 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

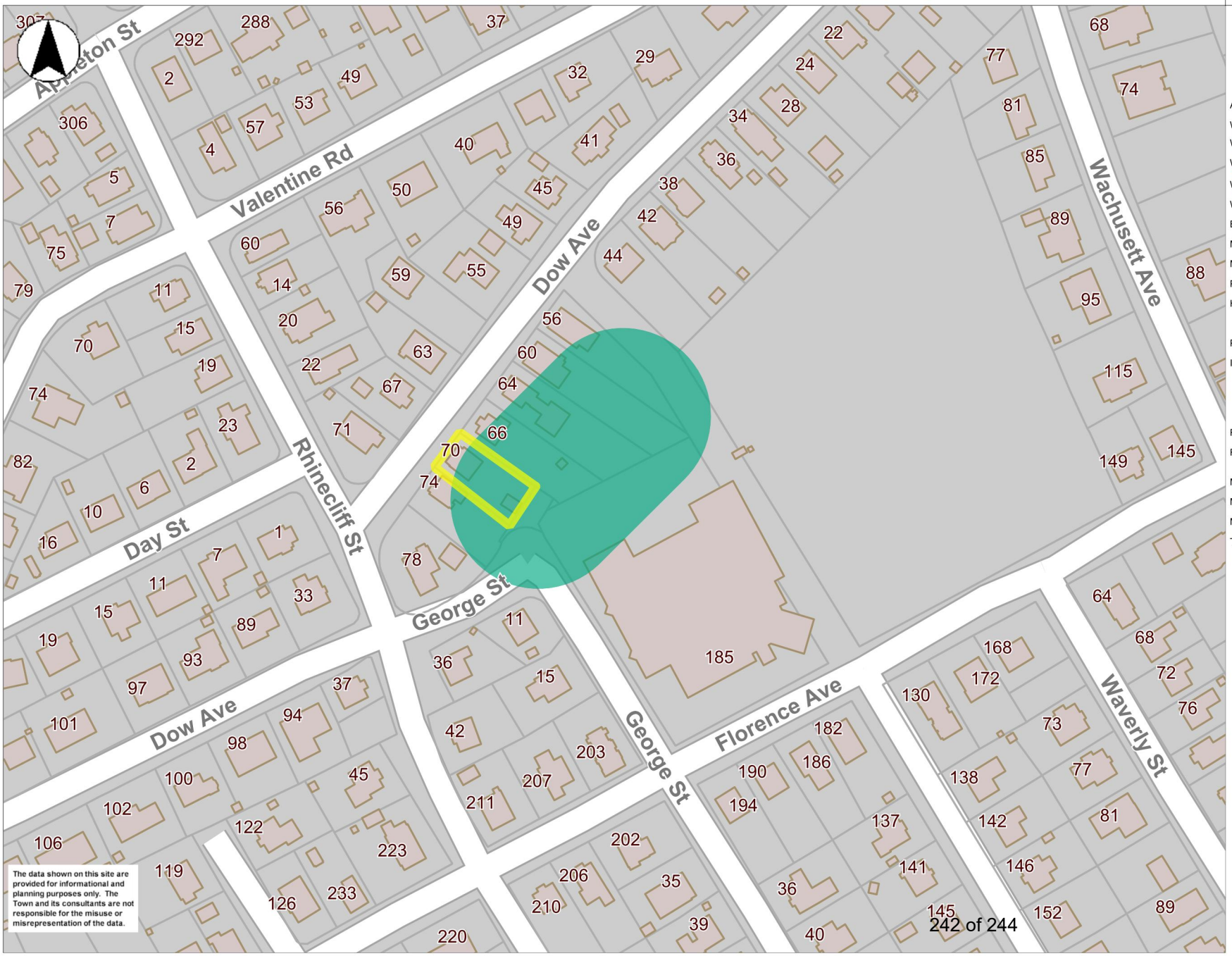
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

LEC
Environmental Consultants, Inc.
Wakefield, MA
781.245.2500
www.lecenvironmental.com

Figure 3: MassGIS Orthophoto & NHESP Map
70 Dow Avenue
Arlington, MA

October 24, 2023

N
0 50 100 Feet



Abutting Towns
Water Body
Water Line
Wetlands
Wetland Regulated Buffer (
Wetland Regulated Riverfro
Buildings
Master Plan - Town Bound
Master Plan Base Map - Sc
Parcels - For Gray Backgro
Highways - White
Interstate
US Highway
State Highway
Pavement Markings
Impervious Surface - For B
Street
Sidewalk
Street Island
Driveway
Parking Lot
Bike Path
Roads - For Large Scale (f
Roads - For Small Scale (f
Major Road
Local Road
Master Plan Base Map - M
Master Plan Base Map - W
Master Plan Base Map - W
Town Boundary - Gray Bac

The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.

0 200 400 ft

Printed on 10/12/2023 at 04:39 PM

Wetland and Flood GIS Viewer

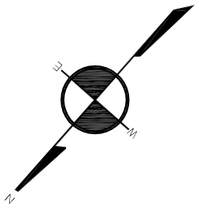
Appendix D

Plan of Land,
prepared by Professional Land Surveyor Thomas Bernardi,
dated October 2, 2023

PLAN OF LAND

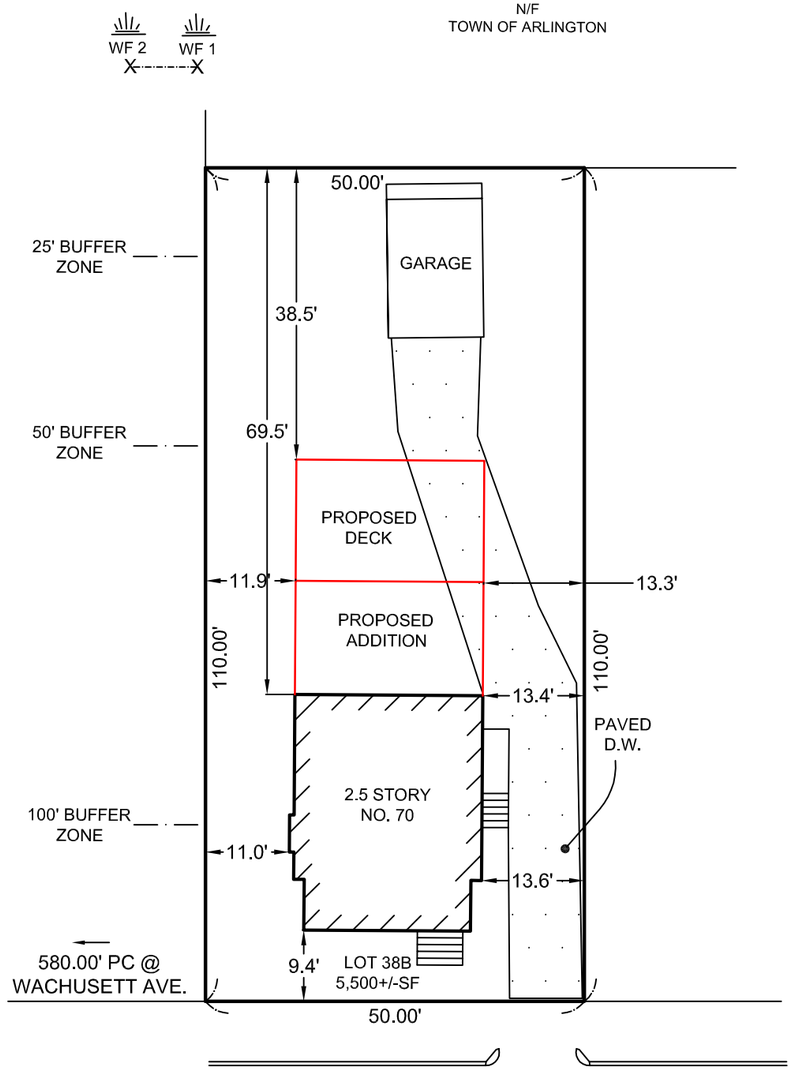
LOCATED AT
70 DOW AVENUE
ARLINGTON, MA

SCALE: 1 INCH = 20 FEET



MASSACHUSETTS SURVEY CONSULTANTS

GLOUCESTER, MA 01930
617-899-0703



ELEVATIONS

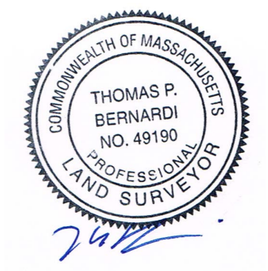
FIRST FLOOR:100'
ROOF HEIGHT FROM
FIRST FLOOR: 126.4'
AVERAGE GRADE AT SIDEWALK: 96.1'

ZONING: R1

MIN. LOT SIZE: 6,000+/-SF
MIN. FRONTAGE: 60'
FRONT SETBACK: 25'
SIDE SETBACKS: 10'
REAR SETBACK: 20'
MAX. LOT. COV. : 35% EXIST.: 18% PROPOSED: 32%
(PROPOSED LOT COV.= EXISTING HOUSE/GARAGE
PROPOSED ADDITION AND PROPOSED DECK).
MAX. HEIGHT: 35'/2.5
MIN. OPEN SPACE: LANDSCAPED: 10%
USABLE: 30%

REFERENCES

DEED: BOOK 76431, PAGE 161
PLANS: 286-49 AND 86-1



NOTES

THIS PLAN WAS MADE FROM AN
INSTRUMENT SURVEY ON THE GROUND IN AUGUST OF 2023 AND
ALL STRUCTURES ARE LOCATED AS SHOWN HEREON.

THIS PLAN WAS PREPARED IN
CONFORMITY WITH THE RULES AND
REGULATIONS OF THE REGISTERS OF DEEDS OF THE
COMMONWEALTH OF MASSACHUSETTS.

THOMAS BERNARDI P.L.S. **DATE: OCTOBER 2, 2023**